CONSTRUCTION NEWS

Supplement to ENGINEERING NEWS. New York, March 23, 1905.

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PLANS AND SPECIFICATIONS ON FILE.

The following Plans (P.), Specifications (S.), and Bidding Sheets (B. S.), may be seen at the office of The Engineering News Publishing Co., 220 Broadway, New York:

Bids close	Work.	Place.	On file.	See issue.
Mar.				
25	Electric crane	Portsmouth, N. H.	S	3- 2
•27	Street lighting	Laconia, N. H.	S	3- 9
•28	Coal pocket, etc.	Atlantic Cy, N. J.	P. & S	3- 2
Apr.				
1	Electric cranes	Portsm'th, N. H.	S	3- 9
•1	Water-works	Montrose, Colo.	S	3-16
•1	Water-works	Montrose, Colo.	S	3-16
•1	Sidewalks	Greenville, Miss.	S	3-16
•8	Bridge	Springfield, Mass.	P	3-23
8	Dredging	Dry Tortugas, Fla.	S	3-23
15	Electric crane	Puget S'd, Wash.	S	3- 9
29	Coal plant	New Orleans, La.	S	3- 9
May				
6	Quay wall	Bremerton, Wash.	S	3-23
•14	Water-works	Mansfield, La.	S	2- 2
Sept.				
1	Steel manufacture	New S. Wales	S	3-23

•Work advertised in Engineering News.

NOTE.—We are desirous of securing specifications and bidding sheets (and plans when not too bulky) of pending work for file in our New York office for the benefit of contractors or others who may be interested in the work. If more sets than one are sent us we shall be pleased to distribute these to contractors who ask for them. When the work is advertised in Engineering News a note that the plans are filed with us will be added to the advertisement without cost.

LIST OF CONTRACTS PENDING.

Bids close. Work. Place. See issue.

LIGHT, HEAT AND POWER PLANTS.

Mar. 27. Street lighting, Laconia, N. H............Mar. 9
Advertised, Eng. News, Mar. 9 and 16.
Mar. 28. Dynamo house, Dover, N. J..............Mar. 9
Mar. 31. Care of lights, Detroit, Mich..............Mar. 16
Apr. 1. Gas works, Fairmont, Neb..............Mar. 23
Apr. 3. Steam heating plant, Kirkland, Ind....Mar. 9
Apr. 3. Electric lighting, Cape Charles, Va. ....Feb. 23
Apr. 6. Electric plant, New Albany, Miss.......Mar. 23
Advertised, Eng. News, Mar. 16 to Apr. 6.
Apr. 11. City lighting, Shreveport, La...........Feb. 16
Apr. 12. Power house, Lockport, Ill..............Feb. 16
Advertised, Eng. News, Feb. 16.
May 15. Electric plant, Jewell City, Kan........Mar. 23

BRIDGES.

Mar. 23. Bridge, Harrisburg, Pa..................Mar. 9
Mar. 23. Bridge approach, Washington, D. C. ....Feb. 23
Advertised, Eng. News, Feb. 23 to Mar. 16.
Mar. 24. Bridge, steel concrete, Cedar Rapids, Ia..Mar. 16
Mar. 25. Bridges, etc., Winnipeg, Man............Mar. 16
Mar. 25. Bridges, Bentonville, Ark..............Mar. 2
Mar. 28. Bridge, Welland, Ont..................Mar. 16
Mar. 29. Bridge, Hutchinson, Minn..............Mar. 23
Mar. 30. Bridges, Columbus, O..................Mar. 16
Mar. 30. Drawbridge, Manistee, Mich............Mar. 2
Advertised, Eng. News, Feb. 23 and Mar. 2.
Mar. 30. Bridge, Providence, R. I................Mar. 9
Advertised, Eng. News, Mar. 9 to 30.
Apr. 1. Bridges, Somerset, Ky..................Mar. 23
Apr. 3. Bridges, steel, Devil's Lake, N. Dak....Mar. 23
Apr. 3. Bridge, Atlanta, Ga....................Mar. 16
Advertised, Eng. News, Mar. 16 to 30.
Apr. 4. Bridge, steel, Spokane, Wash............Mar. 9
Apr. 4. Bridges, steel, Columbus, Ga............Mar. 2
Apr. 4. Bridges, Lincoln, Neb..................Feb. 23
Apr. 4. Bridge, Goldendale, Wash...............Feb. 9
Apr. 4. Bridge, steel, New Castle, Ind.........Mar. 23
Apr. 5. Bridge, Goldbeach, Ore.................Mar. 23
Apr. 5. Retaining wall, Indianapolis, Ind......Mar. 23
Apr. 5. Bridge, steel, Smithland, Ky...........Mar. 23
Apr. 5. Bridge, Dakotah, Ia....................Mar. 23
Apr. 5. Bridge, Langdon, N. Dak.................Mar. 16
Apr. 6. Bridge, Wabash, Ind....................Mar. 2
Apr. 6. Bridges, Bluffton, Ind..................Mar. 23
Apr. 6. Bridge, steel, Warrenton, Mo............Mar. 23
Apr. 7. Bridge, Amoka, Minn....................Mar. 23
Apr. 10. Bridge, Tillamook, Ore.................Mar. 23
Apr. 13. Bridges, etc., Jackson, O..............Mar. 23
Apr. 19. Bridges, Moscow, Idaho.................Mar. 9
May 1. Bridge, Richland Center, Ark...........Mar. 9

BUILDINGS.

Mar. 23. School, Baton Rouge, La................Mar. 2
Mar. 23. School house, Ansonia, Conn............Mar. 16
Mar. 24. Boat house, Fort Howard, Md...........Mar. 23
Mar. 25. Various railway buildings, Winnipeg, Man.Mar. 23
Mar. 25. Masonic Temple, New Martinsville, W. Va.Mar. 9
Mar. 27. City hall, Alpena, Mich.................Mar. 2
Mar. 27. Post office, Lebanon, Pa................Feb. 9
Mar. 27. School house, Boston, Mass.............Mar. 16
Mar. 27. Library, Attleboro, Mass...............Mar. 16
Mar. 27. School, Cleveland, O...................Mar. 16
Mar. 27. Boilers, N. Tonawanda, N. Y............Mar. 16
Mar. 27. School, Newark, O......................Mar. 16
Mar. 27. School, New York, N. Y.................Mar. 16
Mar. 27. Barracks, Fort Washington, Md..........Mar. 16
Mar. 27. School, New York, N. Y.................Mar. 23
Mar. 27. Dome, St. Joseph, Mo...................Mar. 23
Mar. 28. Fire station, New York, N. Y...........Mar. 23
Mar. 28. Post office, Superior, Wis.............Feb. 9
Advertised, Eng. News, Feb. 9 and 16.
Mar. 29. Screens, etc., Delaware City, Del.......Mar. 9
Advertised, Eng. News, Mar. 9 to 23.
Mar. 29. Court house, Baraboo, Wis..............Mar. 16
Mar. 29. Window frames, etc., Washington, D. C..Mar. 16
Advertised, Eng. News, Mar. 16 and 23.
Mar. 29. Church, Toronto, Ont...................Mar. 23
Mar. 30. Hotel, Terre Haute, Ind................Mar. 23
Mar. 31. Jail, Glasgow, Ky......................Mar. 23
Mar. 30. Heating apparatus, Waterloo, Ia........Mar. 9
Mar. 31. School, Cleveland Heights, O...........Mar. 16
Mar. 31. Asphalt plant (Mfg. Pl.), Detroit, Mich...Mar. 16
Apr. 1. Caisson foundations, Chicago, Ill.......Mar. 23
Apr. 3. City hall, Oskaloosa, Ia................Mar. 23
Apr. 3. Iron stairways, etc., New York, N. Y..Mar. 23
Apr. 3. Court-house, Kentland, Ind. ....Feb. 23
Apr. 3. Post-office, Macon, Ga. ....Feb. 23
Advertised, Eng. News, Feb. 23 to Mar. 2.
Apr. 3. College building, Ithaca, N. Y.........Mar. 2
Advertised, Eng. News, Mar. 2 to Mar. 16.
Apr. 3. Freight station, Cincinnati, O..........Mar. 9
Advertised, Eng. News, Mar. 9 and 16.
Apr. 4. Police station, New Haven, Conn.........Mar. 16
Apr. 5. Public buildings, Portland, Me..........Mar. 16
Apr. 5. Hospital building, Charleston, S. C.....Mar. 23
Apr. 6. Church, rectory, Clinton, Ia............Mar. 23
Apr. 6. Post office, Marblehead, Mass...........Mar. 2
Apr. 8. Jail, Monticello, Miss..................Mar. 23
Apr. 11. White bricks, Washington, D. C.........Mar. 23
Advertised, Eng. News, Mar. 23 and 30.
Apr. 12. Jail, etc., Oakland, Md.................Mar. 16
Apr. 12. Court house, Marion, Va.................Mar. 16
Apr. 15. Shop buildings (Mfg. Pl.), Jackson, O..Mar. 16
Apr. 15. Court house, Corsicana, Tex.............Mar. 16
Apr. 17. High school plans, Richmond, Va.......Mar. 16
Apr. 18. Auditorium, St. Joseph, Mo..............Mar. 16
Apr. 20. Officers' quarters, West Point, N. Y....Mar. 23
Advertised, Eng. News, Mar. 23 to Apr. 13.
May 8. Interior finish, New York, N. Y.........Mar. 16
May 9. Mechanical equipment, Now York, N. Y.Mar. 16
June 15. Court-house plans, New Orleans, La......Feb. 23

WATER SUPPLY AND IRRIGATION.

Mar. 23. Water-works, Clare, Mich...............Mar. 16
Mar. 24. Boiler, etc., Port Townsend, Wash......Mar. 9
Mar. 25. Boiler, pump, etc., Ft. Assinniboine, Mont. Mar. 2
Advertised, Eng. News, Mar. 2 to Mar. 30.
Mar. 25. Water-works, electric plant, Alpena, Mich. Mar. 9
Advertised, Eng. News, Mar. 9 and 16.
Mar. 25. Water-works, North Fort Worth, Tex...Mar. 16
Mar. 25. Water pipe, Mansfield, O..............Mar. 23
Mar. 27. Water meters, Victoria, B. C..........Mar. 23
Mar. 27. Water pipe, Memphis, Tenn..............Mar. 23
Mar. 29. Valves, Baltimore, Md...................Mar. 23
Mar. 29. Meters, Cleveland, O....................Mar. 23
Mar. 29. Water-works, Bradley, Ill..............Mar. 16
Mar. 29. Distributing system, San Antonio, Tex..Mar. 9
Mar. 31. Water pipe, Chicago, Ill................Mar. 23
Apr. 1. Reservoir repair, Shippensburg, Pa......Mar. 23
Advertised, Eng. News, Mar. 23 and 30.
Apr. 1. Water-works, Montrose, Colo.............Mar. 16
Advertised, Eng. News, Mar. 16 and 23.
Apr. 3. Irrigation canals, Cody, Wyo...........Mar. 9
Apr. 3. Boilers, Chicago, Ill....................Mar. 23
Apr. 3. Pumping engine, Clarksville, Tenn.......Mar. 23
Apr. 3. Pumping station, Canton, O..............Mar. 23
Apr. 3. Pump, engine, etc., Prescott, Ariz......Mar. 23
Apr. 4. Artesian well, Lumberton, Miss..........Mar. 23
Apr. 4. Water-works, Ellisville, Miss...........Mar. 23
Advertised, Eng. News, Mar. 23.
Apr. 6. Water-works, etc., New Albany, Miss....Mar. 23
Advertised, Eng. News, Mar. 16 to Apr. 6.
Apr. 6. Pipe line, etc., Boston, Mass...........Mar. 9
Advertised, Eng. News, Mar. 9 to Apr. 6.
Apr. 10. Water pipe, Winnipeg, Man..............Feb. 16
Apr. 10. Pipe line, Augusta, Me..................Mar. 23
Advertised, Eng. News, Mar. 23 to April 13.
Apr. 12. Pump house, Washington, D. C..........Mar. 23
Apr. 12. Water-works extension, St. Johns, N. B. Mar. 23
Advertised, Eng. News, Mar. 23 to Apr. 13.
Apr. 12. Water-works, etc., Portage la Prairie, Man. Mar. 9
Advertised, Eng. News, Mar. 9.
Apr. 18. Pumping machinery, New Orleans, La..Feb. 16
Advertised, Eng. News, Feb. 16 to April 20.
Apr. 18. Pumping engine, Toronto, Ont...........Feb. 23
Advertised, Eng. News, Feb. 23 to Mar. 23.
May 11. Water main connection, New Orleans, La. Mar. 23
May 14. Water-works, Mansfield, La..............Mar. 2
Advertised, Eng. News, Mar. 2.
May 15. Pumping engine, Montreal, Que..........Mar. 9
Advertised, Eng. News, Mar. 9.
May 16. Irrigation canals, Denver, Colo.........Mar. 23
Advertised, Eng. News, Mar. 23 to May 4.

SEWERAGE.

Mar. 23. Sewers, Cleveland, O....................Mar. 16
Mar. 24. Sewers, Dixon, Ill......................Mar. 23
Mar. 25. Sewer, Harrisburg, Pa...................Mar. 23
Mar. 27. Sewer extension, Muscatine, Ia..........Mar. 23
Mar. 27. Inlets, drains, Atlantic City, N. J......Mar. 23
Advertised, Eng. News, Mar. 23.
Mar. 28. Sewers, Dravosburg, Pa..................Mar. 23
Mar. 29. Central sewer, Columbus, O..............Mar. 16
Advertised, Eng. News, Mar. 16 and 23.
Mar. 29. Sewer, Portsmouth, O....................Mar. 9
Mar. 29. Sewers, Cincinnati, O...................Mar. 9
Mar. 29. Sewerage, Ft. McIntosh, Tex.............Mar. 9
Mar. 31. Sewer system, Salem, Mass...............Mar. 9
Advertised, Eng. News, Mar. 9 to 23.
Apr. 3. Sewage lift, Ft. Leavenworth, Kan......Mar. 16
Apr. 3. Sewers, tanks, Kirkwood, Mo.............Mar. 16
Advertised, Eng. News, Mar. 16.
Apr. 3. Sewer, Grinnell, Ia.....................Mar. 23
Apr. 5. Sewer systems, St. Joseph, Mo...........Mar. 16
Apr. 7. Sewer system, New York, N. Y............Mar. 16
Apr. 10. Sewers, Cincinnati, O...................Mar. 23
Apr. 10. Sewers, Menominee, Mich.................Mar. 23
Apr. 18. 65 miles sewers, New Orleans, La......Feb. 16
Advertised, Eng. News, Feb. 16 to April 20.

STREETS AND ROADS.

Mar. 23. Paving, asphalt & brick, Ft. Wayne, Ind. Mar. 9
Mar. 23. Stone, Jerry City, O....................Mar. 9
Mar. 23. Curbs and gutters, Ft. Leavenworth, Kan. Mar. 16
Mar. 24. Grading, Omaha, Neb.....................Mar. 16
Mar. 24. Macadamizing, Cincinnati, O............Mar. 2
Mar. 25. Road, Cincinnati, O.....................Mar. 9
Mar. 25. Road, Harrisburg, Pa....................Mar. 9
Mar. 25. Paving, etc., Seattle, Wash.............Mar. 16
Mar. 25. Paving, etc., Boston, Mass..............Mar. 16
Mar. 27. Street, Tacoma, Wash....................Mar. 16
Mar. 27. Paving, asphalt, Cincinnati, O..........Mar. 9
Mar. 27. Sidewalks, etc., Springfield, Mass......Mar. 23
Mar. 27. Paving, New Orleans, La.................Mar. 23
Mar. 27. Curbing, Atlantic City, N. J............Mar. 23
Advertised, Eng. News, Mar. 23.
Mar. 27. Paving, Syracuse, N. Y..................Mar. 23
Mar. 27. Paving, etc., Long Island City, N. Y....Mar. 23
Mar. 28. Grading, Marquette, Mich................Mar. 23
Mar. 28. Paving, Troy, N. Y......................Mar. 23
Mar. 28. Sidewalks, cinder, Chicago, Ill.........Mar. 23
Mar. 28. Paving, New Brighton, N. Y..............Mar. 16
Mar. 29. Plank walk, Fort Barrancas, Fla.........Mar. 16
Mar. 29. Paving, etc., Brooklyn, N. Y............Mar. 16
Mar. 29. Paving, asphalt, Lima, O................Mar. 9
Mar. 29. Paving, brick, Cincinnati, O............Mar. 9
Mar. 29. Paving, New York, N. Y..................Mar. 23
Mar. 29. Sidewalks, cement, Indianapolis, Ind....Mar. 23
Mar. 29. Paving, wood blocks, Baltimore, Md......Mar. 23
Mar. 30. Road, Boston, Mass......................Mar. 23
Mar. 30. Fire clay, Detroit, Mich................Mar. 16
Mar. 31. Paving material, Minneapolis, Minn......Mar. 16
Mar. 31. Graveling, Greenville, O................Mar. 23
Apr. 1. Macadamizing, Acton, Ont................Mar. 23
Apr. 1. Macadamizing, Norwood, O................Mar. 9
Apr. 1. Paving, Tacoma, Wash....................Mar. 9
Apr. 3. Paving, Montgomery, Ala.................Mar. 9
Apr. 3. Roads, Bedford, Ia......................Mar. 16
Apr. 3. Roads, Harrisburg, Pa...................Mar. 16
Apr. 3. Macadamizing, Cortland, N. Y............Mar. 23
Apr. 3. Road, Findlay, O........................Mar. 23
Apr. 3. Road, Vernon, Ind.......................Mar. 23
Apr. 3. Roads, Bedford, Ind.....................Mar. 23
Apr. 3. Paving, brick, Michigan City, Ind......Mar. 23
Apr. 3. Road, Vicksburg, Miss...................Mar. 23
Apr. 3. Macadamizing, Bowling Green, O..........Mar. 23
Apr. 4. Paving, vitrified brick, Marion, Ind....Mar. 23
Apr. 4. Road, Vincennes, Ind....................Mar. 16
Apr. 4. Roads, Bloomfield, Ind..................Mar. 16
Apr. 4. Sidewalks, Greenville, Miss. ....Mar. 16
Advertised, Eng. News, Mar. 16 to Apr. 6.
Apr. 5. Paving, Birmingham, Ala.................Mar. 16
Apr. 5. Roads, Peru, Ind ....Mar. 2
Apr. 5. Road, Paoli, Ind........................Mar. 23
Apr. 5. Roads, Sullivan, Ind ....Mar. 23
Apr. 8. Bridge, Springfield, Mass...............Mar. 23
Advertised, Eng. News, Mar. 23 and 30.
Apr. 10. Streets, La Fayette, Ind...............Mar. 23
Apr. 10. Macadamizing, Menominee, Mich. ....Mar. 23
Apr. 10. Sidewalks, Delaware City, Del..........Mar. 16
Advertised, Eng. News, Mar. 16 to Apr. 6.
Apr. 14. Creosoted block, Minneapolis, Minn.....Mar. 16
Apr. 14. Road, shell, Ft. Mott, N. J............Mar. 23
Apr. 15. Roads, Sullivan, Ind....................Mar. 23
Apr. 18. Grading, etc., La Crosse, Wis...........Mar. 2
Apr. 21. Paving, Cincinnati, O...................Mar. 23
June 1. Paving, brick, Fremont, O...............Mar. 16
No date. Sidewalks, Ogden, Utah..................Mar. 23

MISCELLANEOUS CONTRACTS.

Mar. 23. Street sprinkling, Plainfield, N. J......Mar. 16
Mar. 23. Switchboards, New York, N. Y............Mar. 16
Mar. 25. Electric crane, Portsmouth, N. H........Mar. 2
Mar. 25. Wharf, grading, filling, New Orleans, La. Feb. 23
Mar. 25. Sprinkling wagons, Washington, D. C....Mar. 23
Mar. 27. Pier extension, New York, N. Y.........Mar. 23
Mar. 25. Electric elevator, Waco, Tex............Mar. 9
Mar. 27. Riprap embankment, Boston, Mass.......Mar. 2
Advertised, Eng. News, Mar. 2 to 30.
Mar. 27. Mooring stones, Portland, Me............Mar. 16
Mar. 27. Coal-handling machinery, Wash., D. C..Mar. 16
Advertised, Eng. News, Mar. 16.
Mar. 28. Sand, piles, cable, etc., Washington, D. C. Mar. 16
Mar. 28. Steel shed, New Orleans, La.............Mar. 16
Mar. 28. Coal pocket, etc., Atlantic City, N. J....Mar. 2
Advertised, Eng. News, Mar. 2 and 9.
Mar. 28. Drainage, Grant Park, Ill...............Mar. 9
Advertised, Eng. News, Mar. 9.
Mar. 28. Sprinkling wagons, Winnipeg, Man......Mar. 23
Mar. 29. Pier, New York, N. Y....................Mar. 23
Mar. 30. Road rollers, scarifiers, New York, N. Y..Mar. 23
Mar. 30. Coal conveying apparatus, W. Point, N. Y. Mar. 9
Advertised, Eng. News, Mar. 9 to 30.
Mar. 30. Rock excavation, Boston, Mass.........Mar. 2
Advertised, Eng. News, Mar. 2 to 30.
Mar. 31. Electric railway, China ....Oct. 20
Advertised, Eng. News, Oct. 20 to Dec. 29.
Apr. 1. Dredging, Sweden ....Nov. 24
Apr. 1. Electric cranes, Portsmouth, N. H.......Mar. 9
Apr. 3. Sanitary fixtures, etc., Washington, D. C. Mar. 16
Apr. 3. Breakwater extension, Richibucto, N. B. Mar. 23
Apr. 4. Cement, Winnipeg, Man...................Mar. 23
Advertised, Eng. News, Mar. 23 and 30.
Apr. 4. Cable, ties, reamers, Washington, D. C..Mar. 23
Apr. 4. Ditch, Fairmont, Minn...................Feb. 23
Apr. 6. Creo-resinating lumber, New York, N. Y. Mar. 23
Apr. 8. Dredging, Dry Tortugas, Fla............Mar. 23
Apr. 8. Ditch work, Kenton, O...................Mar. 23
Apr. 8. Railway, Yazoo & Miss. Valley..........Mar. 9
Apr. 10. Steel rails and fishplates, Australia.....Mar. 9
Apr. 10. Channel improvement, Bermuda ....Jan. 26
Advertised, Eng. News, Feb. 2.
Apr. 10. Dam, canals, etc., Denver, Colo........Feb. 16
Advertised, Eng. News, Feb. 16 to Mar. 30.
Apr. 10. Lumber, Washington, D. C..............Mar. 23
Apr. 11. Machinery, etc., Washington, D. C.....Mar. 16
Apr. 11. Foundry equipment, Washington, D. C..Mar. 16
Apr. 12. Monument, Andersonville, Ga............Mar. 16
Apr. 13. Portland cement, Washington, D. C......Mar. 9
Advertised, Eng. News, Mar. 9 to April 13.
Apr. 15. Cruisers, Washington, D. C.............Mar. 2
Apr. 15. 100 miles railway, Tidewater Ry........Mar. 9
Advertised, Eng. News, Mar. 9 to Apr. 6.
Apr. 15. Electric crane, Puget Sound, Wash.....Mar. 9
Apr. 17. Dam, Pittsburg, Pa......................Mar. 23
Advertised, Eng. News, Mar. 23 to Apr. 20.
Apr. 17. Dam, foundations, etc., Pittsburg, Pa..Mar. 23
Advertised, Eng. News, Mar. 23 to Apr. 20.
Apr. 19. Saws, planers, scrapers, etc., Wash., D. C. Mar. 23
Apr. 19. Dam, San Francisco, Cal................Mar. 23
Advertised, Eng. News, Mar. 23 to Apr. 20.

Apr. 25. Dredging, New Orleans, La. .... Mar. 9
Apr. 25. Canals, etc., New Orleans, La. .... Feb. 16
Advertised, Eng. News, Feb. 16 to April 20.
Apr. 29. Coal plant, New Orleans, La. .... Mar. 9
May 1. Light-house, Egypt .... Dec. 22
May 6. Quay wall, Bremerton, Wash. .... Mar. 23
May 10. Ditching, Stevens Point, Wis. .... Mar. 2
Sept. 1. Steel manufacture, New South Wales .. Mar. 23
No date. Removing stone, New York, N. Y. .... Mar. 9
Advertised, Eng. News, Mar. 9 to Apr. 6.

RAILWAYS.

ATCHISON, TOPEKA & SANTA FE.—We are informed that the LANTRY-SHARP CONTRACTING CO., Gumbel Bldg., Kansas City, Mo., has been awarded large contracts by the Santa Fe Co. for grading and masonry work on its proposed double-track from Chicago west to Newton, Kan. The grading consists of large quantities of steam shovel, team and rock work, and the masonry will be the extension of the present single-track abutments, piers and arches and the building of head walls for cast-iron pipe, etc. It is understood that the most of the team work will be sub-let, and that the company itself will do the masonry and steam shovel work.

ATLANTIC & BIRMINGHAM.—Contracts will be let at once for grading the proposed extension westward from Montezuma, Ga., for probably 50 miles. H. M. Atkinson, Capt. W. C. Raoul and S. M. Inman, of Atlanta; Gordon Abbott and T. Jefferson Cooledge, of Boston; Percy R. Pyne, of New York, and George Dole Wadley, of Waycross, Ga., are promoters. Application for charter has been made. The construction will be under the direction of the ATLANTIC & BIRMINGHAM CONSTRUCTION CO., of which H. M. Atkinson is president. The new railroad will be known as the Atlanta, Birmingham & Atlantic Railroad. Alexander Bonnyman is Ch. Engr. of A. & B., at Oglethorpe, Ga. This extension will be about 240 miles long when completed and may run into Birmingham.

BALTIMORE & OHIO.—Contract is reported to have been awarded for Cameron-Confluence (Pa.) cut-off.

BELGO-AMERICAN DE PETROLES DU WYOMING.—Joseph H. Lobell, of Chicago, is interested in project to construct this railway from Orin Junction, Wyo., to Lander. Headquarters probably will be located in Denver, Colo., and Casper, Wyo.

BUFFALO, ROCHESTER & PITTSBURG.—Plans are reported completed for new freight yards to be built along Indiana branch line. J. M. Floesch is Ch. Engr., Rochester, N. Y.

CANADIAN NORTHERN.—Construction work contemplated this year is announced as follows: Completion of the main line to Edmonton, N. W. T.; extension of the Prince Albert line from Melfort to Prince Albert; completion of the Rossburn line to Rossburn; completion of the Carberry-Brandon section; completion of the Springfield branch, a distance of 20 miles from Winnipeg; completion of the Thunder Hill branch from Swan River to a point just beyond the western boundary of the Province near Thunder Hill. M. H. McLeod, Winnipeg, Man., is Ch. Engr.

CHICAGO & NORTHWESTERN.—George F. Bidwell, Mgr. N. & W. division, has applied for authority to survey and locate a line for the Chicago & Northwestern Ry., from eastern boundary of Shoshone Indian reservation in Wyoming, across the reservation to Lander, Wyo., and thence to Thermopolis.

COLORADO, COLUMBUS & MEXICAN.—We are informed that S. LOUDENBACH & CO., 95 Dearborn St., Chicago, and WILLIAM R. SHELDON, New York, are the contractors for building this railway. As yet only preliminary organization has been effected. Company has been incorporated in New Mexico with $5,000,000 capital stock. It is planned to build from Salt Lake City, Utah, to El Paso, Tex., and eventually to Monterey, Mexico. B. Y. McKeyes, Deming, N. Mex., is interested.

COLORADO & SOUTHERN.—It is unofficially stated that this line will be extended to Mexico City, Mexico. H. W. Cowan, Denver, Colo., is Ch. Engr.

DELAWARE & EASTERN.—Application has been made for rights to construct a 57-mile road from main line of New York, Ontario & Western to Delhi, N. Y. Company is capitalized at $600,000. Among organizers are William Barbour, Paterson, N. J.; F. L. Phillips, Pittsburg; Hon. L. A. Waters, of Scranton, Pa.; C. D. Simpson, Scranton, and others.

DELTA SOUTHERN.—W. H. Wells, Ch. Engr., Washington, D. C., informs us that contract for building this line from connection with Southern Ry. at Elizabeth, Miss., north 15 miles, has been awarded to BREWER & JONES, of Birmingham, Ala. Surveys are completed and practically all right-of-way obtained. J. S. B. Thompson, of Atlanta, Ga., is Pres. Capital is secured.

GULF, HUTCHINSON & NORTHWESTERN.—Eugene Tilleux, Hutchinson, Kan., the promoter of this road, has announced that construction will be begun from Hutchinson to Arkansas City, Kan., from where branches will be built to Cheyenne, Wyo., and to Gulf of Mexico.

LECKRONE & LITTLE WHITELEY CREEK.—Surveys are said to be under way for this proposed 15-mile railroad. It will extend from Waynesburg to another point in Greene county.

LITTLE ROCK & SOUTHERN.—Location surveys are reported completed for the proposed Little Rock & Southern railway from Traskwood, Ark., to Crossett, Ark., 118 miles, through Saline, Hot Springs, Grant, Dallas, Bradley and Ashley counties. The Rock Island system is said to be promoting this line.

MANUFACTURERS' RY.—The contract for the construction of the Manufacturers' Ry., which is to be a belt line around Lansing, Mich., connecting with the Grand Trunk Ry., the Michigan Central Ry., and the Lake Shore Ry., in Lansing, has been let to W. E. TENCH & CO., contractors, of 273 Park St., Detroit, Mich. Construction work will commence at once.

MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE.—EDMOND BROS. have contract for new line from Luck to Sauntry, Wis.

MISSISSIPPI CENTRAL.—Contract for grading 28 miles of railway between Brookhaven and Silver Creek has been awarded to the WORTHINGTON CONSTRUCTION CO., of Birmingham, Ala. Noted on March 2.

MISSISSIPPI.—It is reported that a new railroad is soon to be constructed by the Ross Lumber Co., of Merrill, Miss., under the supervision of Col. F. B. Merrill, who is a stockholder in the company.

NEW YORK, NEW HAVEN & HARTFORD.—The Shore Line division between Providence, R. I., and New Haven, Conn., will be improved and made a four-track line. Six miles of this four-tracking will be begun at once, at Saybrook.

NEW YORK CENTRAL & HUDSON RIVER.—J. E. Turner, Ch. Surveyor, has completed survey for proposed line between Springfield, Mass., and New York. H. Fernstrom is Ch. Engr.

NORTHERN PACIFIC.—The Northern Pacific has purchased the Columbia River & Northern Ry., running between Lyle and Goldendale, Wash., it is reported. Company will build a line from Lyle to Vancouver. The old Columbia River & Northern road will be extended from Goldendale to present main line of Northern Pacific. B. L. Crosby is principal asst. Engr., at Tacoma, Wash.

The Denhoff-Coal Harbor, (N. Dak., extension may be undertaken soon. It will be about 50 miles long.

OREGON.—Steps are reported to have been taken toward construction of a railroad from Medford, Ore., to Crater Lake, and from Grants Pass, Ore., to Crescent City, Cal. W. I. Vawter, Pres. of the Jackson County Bank, Medford, is one of the promoters of the Medford-Crater Lake road. Capt. J. W. Morgan Draper, of San Francisco, is said to be interested in the Grants Pass-Crescent City road.

PENSACOLA, ALABAMA & WESTERN.—We are informed that surveys are nearly completed. Definite details have not yet been decided. The Pensacola, Alabama & Western is said to be already chartered in Alabama, and has applied for a charter in Mississippi to build a railroad from Memphis, Tenn., via Columbus, Miss., to Pensacola, Fla. As planned, it will run southeasterly from Memphis, and will strike the Mississippi state line on the northern boundary of De Soto County, running through the counties of De Soto, Tate, Lafayette, Marshall, Calhoun, Chickasaw and Clay, into Lowndes to Columbus, and thence into Alabama. The company may supersede the Columbus, Pensacola & Memphis, chartered in 1903 to build from Columbus to Aberdeen, Miss., and Pensacola, Fla., of which Newman Cayce, of Columbus, Miss., was president. The incorporators of the Pensacola, Alabama & Western are: C. A. Johnson, of Columbus, Miss.; J. E. Stillman, T. C. Watson, J. J. Sullivan, W. S. Keyser and D. Gillies, of Pensacola, Fla.

PHILADELPHIA & READING.—Contracts for grading and masonry for 22½ miles have been let, as follows: On the New York division, extending from Glen Lake, N. Y., to Janney, where for 3½ miles the road will be four-tracked, the JOHN SHIELDS CONSTRUCTION CO., 1 Madison Ave., New York. Four miles of third track to be built between Skillman and Belle Mean, for eastbound freight; B. M. & J. F. SHANLEY CO., 14 South Broad St., Philadelphia, has been awarded the contract. THE HOFFMAN ENGINEERING & CONTRACTING CO. has secured the work of four-tracking the main line, between Linfield and Aramingo, Pa., a distance of 1½ miles. WILLAUER & SON, of Pottstown, Pa., will do the two miles of third track for south-bound traffic, from Royersford to Mingo. JOHN SHIELDS CONSTRUCTION CO. will build the extra north-bound track between Douglassville and Monocacy, a distance of three miles, and JOHN McMINEMY the 3½ miles of double-tracking on the East Penn, between Reading and Akentown.

PENNSYLVANIA RY.—The Pennsylvania Railroad is reported to be about to undertake the construction of a 60-mile extension of the Pittsburg, Fort Wayne & Chicago Railroad, which will run from Enon to Red Bank, on the Allegheny River. There it will connect with the low grade division, extending to Driftwood, on the Philadelphia & Erie Railroad. Estimated cost $12,000,000. Plans call for a double-track line. It will take two years to build this extension.

SANTA FE, RATON & EASTERN.—We are informed that contract for building this railway will be let next month. Surveys completed and right-of-way secured. Capital has been arranged for. The line will extend from the Marie A. Clarke ranch to Raton, N. Mex., ten miles. Frank E. Jennison, 31 Nassau St., is named as an incorporator. Charles N. Bayne, John Morrow and Alva Hobbs are also incorporators. Frederick Pelouze is Pres. and Wm. McClintock, Ch. Engr., at Raton. Capital, $300,000.

SOMERSET RY.—This line is being extended to Birch Point, on Moosehead Lake. Previously mentioned. W. M. Ayer, Oakland, Me., is Mgr.

SOUTHERN.—Contract has been let for the construction of double-track from Greensboro to High Point, N. C. Contract has also been awarded, according to a report, for double-tracking line between Pelham and Danville. When these two sections are completed contracts probably will be let for double-track work between Danville and Spencer, N. C.

The Southern railway is reported to have engineers making a survey from Marion, N. C., north to Johnson City, Tenn. It is proposed to build an extension from these points over the highest mountains east of the Rockies, through what is known as the Blue Ridge chain, with an average elevation at the gorges of 4,000 ft. above sea level.

TEXAS.—It is stated that work will begin next June on a new railroad in Texas, extending from San Antonio to San Diego, a distance of 125 miles, and from that point to the Rio Grande River, a distance of 115 miles. Those who are back of the project are L. J. Polk, former vice-Pres. of the Santa Fe in Texas, and E. A. Garvey, who was formerly Ch. Engr. of the Texas Pacific. The right-of-way has been secured, and its promoters state that it will cost, including equipment, $4,320,000. The road will connect at San Diego with the Mexican Central.

UTAH.—Preliminary survey from Dragon to Vernal, Utah, has been run. Engineer Johnson is in charge of surveying party, at Vernal.

WATERTOWN TRANSPORTATION CO.—A. L. Rowe, Secy., Watertown, S. Dak., writes us that bids will be received about April 1 for building this steam road from Watertown to Lake Kampeska, ten miles. Estimated cost, $65,000. There will be about 12,000 yds. of earth work. Company is in market for engines, cars and all construction material. Previously noted.

WESTERN PACIFIC.—Virgil G. Bogue, C. E., 17 William St., New York, has made final report on the surveys for this railroad. It is planned to build from San Francisco, Cal., to Salt Lake City, Utah, within 2½ years from date of letting contracts. G. L. Dillman, Safe Deposit Bldg., San Francisco, Cal., is Ch. Engr.

YOUNGSTOWN & SOUTHERN.—Construction work on Youngstown & Southern railroad from Columbiana to East Liverpool, O., will be resumed April 1. The road is built from Youngstown to Columbiana. George Tod, Jr., is Ch. Engr., at Youngstown, O.

STREET AND ELECTRIC RAILWAYS.

GENEVA, N. Y.—The Rochester & Eastern Co. has decided to build a supplementary electric road between Rochester and this city. It is said work will be begun as soon as weather permits. The plans are to build a new line from Canandaigua to Geneva via Shortsville, Clifton Springs and Phelps. John H. Pardee, of Canandaigua, is Mgr.

WATERTOWN, N. Y.—Loomis Allen, Gen. M[illegible] of the Utica & Mohawk Valley Ry. Co., has made an [illegible] of Rome road, from Carthage to Sackett's H[illegible] with a view of equipping that road with electricity [illegible] places named. It is more than probable that [illegible] stretch will be equipped before end of summer.

HARTFORD, CONN.—It is stated that the N[illegible] New Haven & Hartford R. R. Co. is planning [illegible] sion of Hartford Street Ry. Co. to Middletown [illegible] side of Connecticut River, and to Portland [illegible] Glastonbury on east side. Henry Van Ormer is [illegible] Engr.

NEW LONDON, CONN.—Preparations are b[illegible] for beginning of work on New London & E[illegible] Street Ry. Co.'s line. Contracts have been a[illegible] to WESTINGHOUSE ENGINEERING CO. for [illegible] cars. Contracts for power house equipment [illegible] also awarded to same company. Work will be [illegible] from Niantic end.

BRIDGEPORT, CONN.—The House passed a bill [illegible] izing Wheeler & Wilson Mfg. Co. and Union [illegible] Cartridge Co. to construct and operate an ele[illegible] way for transportation of freight between the[illegible] and freight yards.

JEANNETTE, PA.—The contract for electrical [illegible] ment for proposed electric railway from Jeannette [illegible] West Newton, Pa., to be constructed by Jeannette, W[illegible] ton & Monongahela Valley Street Ry. Co., has been given to NEW ENGLAND ENGINEERING CO., of this city. The line will be 13 miles long and w[illegible] pass through Edna, Arona and New Madison. Construction work will begin April 1.

TARENTUM, PA.—Borough Council has an ordinance granting right-of-way through borough of the Tarentum & Brackenridge Street Ry. Co. The line will run from Tarentum to Brackenridge and will later be extended to Freeport.

WEST CHESTER, PA.—The West Chester Street Ry. Co. has had surveys made with a view of making several extensions during the coming year. John W. Crox is Ch. Engr. Some of these will undoubtedly be built in the near future.

CORRY, PA.—Bids are wanted for construction of Corry, Findley Lake & Northeast Ry. Work will require [illegible] cu. yds. earth cut and 431,372 cu. yds. earth fill, [illegible] ft. track construction, 28 steam railroad switches and frogs, 22,200 short soldered rail bonds, and 200 cross bonds to place. Forty-eight miles of four-wire fence, 31 miles telephone line, block signal system, etc., are to be built; also trolley poles and wire erected. All the work is to be for single-phase high tension line. All material will be furnished by railway, and delivered to contractor along the line. Plans may be seen after March 25 by application to G. H. Dodge, St. James Hotel, Corry, Pa., and all correspondence should be directed to him.

GRAHAM, VA.—The Bluestone Traction Co., principal office, Graham, has been chartered. Incorporators: John Walters, Pres.; J. H. Sluss, of Graham; Edwin Mann, of Bluefield, W. Va. Capital stock, $100,000. Objects and purposes, the operation of an electric railway in Virginia.

ROANOKE, VA.—The Roanoke Railway & Electric Co. has been granted a franchise by City Council for the extension of its line into the Belmont section. J. W. Hancock is Mgr.

NORFOLK, VA.—The Seaboard Traction Co. has applied to Council of Portsmouth, Va., for rights of way for an electric railroad, which will run from Smithfield to Portsmouth and Suffolk, and thence on through Petersburg to Manchester, opposite Richmond. Work is to begin within two months, and to be completed within two years. L. R. Britt, of Norfolk, is Pres.

MANNINGTON, W. VA.—The Mannington Light & Power Co. has applied for a franchise to construct and operate an electric railway in connection with its lighting business. L. O. Carr is Ch. Engr.

WAYNESVILLE, N. C.—Waynesville Railway & Power Co. wants estimates on electrical equipment for rolling stock for 35 miles of electrical railway, central rail system.

ATLANTA, GA.—The Georgia Railway & Electric Co. may extend its Brookwood line to Buckhead, a distance of two miles. Thos. K. Glenn is Mgr., 24 East Alabama st., Atlanta.

EAST LAKE, ALA.—A franchise has been granted by City Council to East Lake Land Co. to construct electric car lines here. Work will commence at once. W. W. Crawford is Pres.

LAKE CHARLES, LA.—Contracts have been closed with WESTINGHOUSE CO. for equipment for the Lake Charles Street Railway. Thompson J. Bird is Ch. Engr.

JOHNSON CITY, TENN.—The street car line recently built from this city to Soldiers' Home will be extended to Jonesboro at a cost of $50,000. Col. W. P. Brownlow is interested.

JOHNSON CITY, TENN.—A charter has been granted the Johnson City, Bakersville & Southern Ry. Co., with a capital stock of $25,000. The company proposes to construct a railroad from Johnson City through Unicoi County into North Carolina. Wm. E. Uptegrove is behind the project. It will be constructed at an early date.

NASHVILLE, TENN.—It is understood that the Nashville Railway & Light Co. has set aside over $600,000 for permanent improvements and rebuilding of tracks in Nashville during 1905. Percy Warner is Pres. and Mgr.

CINCINNATI, O.—Cincinnati Northern Traction Co. has been organized to take over the old Cincinnati, Dayton & Toledo electric line between this city and Dayton. The line will be reconstructed, straightened and partially double tracked. C. A. Alderman, Traction Bldg., Cincinnati, is Engr. of Construction.

LIMA, O.—We are informed that the contract for constructing electric line from Lima to Findlay, a distance of 32 miles, for Lima, Findlay & Toleda Ry. Co., has been awarded to CLEVELAND (O.) CONSTRUCTION CO. Est. cost, $500,000.

BARBERTON, O.—The Barberton, Wadsworth & Western Traction Co. has decided to establish its car house and power station at Barberton. Work between Barberton and Wadsworth will start in the near future. J. Edward Collins, of Barberton, is Ch. Engr.

COLUMBIA CITY, IND.—The proposed electric railway from Columbia City to Goshen is being surveyed. It will run through Hecla, thence to North Webster, Vawter Park and Syracuse.

LEBANON, IND.—The contract for constructing grade on Thorntown extension of Northwestern Traction line has been awarded to W. R. HINES, of Frankfort, and W. R. DALTON, of Lebanon. The work of building the ten miles of track will be begun at once.

KANKAKEE, ILL.—The Kankakee Interurban Ry. Co., Trust & Savings Bank Bldg., Kankakee, plans to begin about April 1, the construction of its proposed road to connect Kankakee, Momense, St. Anne and Waldron.

MANITOWOC, WIS.—The Fox River Ry. Co., of Manitowoc, has been incorporated to build and operate an electric railway in Manitowoc, Sheboygan and Ontagamie Counties; capital, $25,000. Incorporators: Henry W. and Fred Beyersdorf, of Milwaukee, and L. H. Bazlen, of Brillion, Wis.

DAVENPORT, IA.—The directors of the Tri-City Ry. Co. have appropriated $100,000 for track improvements during this coming season. T. Gowling, of Rock Island, Ill., is Ch. Engr.

MINNEAPOLIS, MINN.—The Twin City Rapid Transit Co., according to press reports, has asked for bids on new line from Lake Harriet to Excelsior. D. W. Dozier, of Minneapolis, is Ch. Engr.

JONESBORO, ARK.—Dr. L. W. Copeland and F. G. Taylor, according to the "Pink Sheet Daily Bulletin," have applied for a franchise to construct an electric street railway.

AUSTIN, TEX.—The project of building interurban electric railway is being considered by local capitalists. The distance is about 75 miles.

SAN ANGELO, TEX.—Edward Merrick and A. J. Mergan have taken the necessary preliminary steps looking to the construction and operation of an electric street railway system here.

LAS CRUCES, N. M.—Incorporation papers have been filed by Rio Grande Electric Ry. Co. The incorporators and directors are: Henry D. Bowman, of Las Cruces, and Maurice T. Brown, E. C. Wade, John H. May and Jos. T. Bonham. The New Nexico headquarters are at Las Cruces, Dona Ana County, and the capitalization is $1,000,000. The company intends to build 65 miles of railway, from El Paso, Tex., to Organ, via Las Cruces and Dona Ana, Dona Ana County.

SPOKANE, WASH.—President Cleveland of Spokane Power & Transportation Co., states that company is making surveys for proposed road to Davenport, and have nearly reached Reardan. Contracts for part of grading will be let by May 1.

BOISE, IDAHO.—We are informed that W. E. Pierce, of Boise, has secured a franchise from City Council to construct an electric railway 63 miles in length. Surveyors are at work and right-of-way is being secured.

LIGHT, HEAT AND POWER PLANTS.

The names of parties awarded contracts are printed in capital letters.

DALTON, MASS.—THE STANLEY ELECTRIC MFG. CO., of Pittsfield, Mass, has contract for electrical equipment in new Crane power plant at Dalton. Cost of equipment is about $15,000.

BATAVIA, N. Y.—Proposal to furnish electric lights and power to this town has been submitted by A. L. Swett, Supt. A. L. Swett, Light & Power Co., of Medina. Dr. Le Seur is Secy., Bd. of Trade.

FREEPORT (L. I.), N. Y.—It is reported that the South Shore Gas Co., George MacDonald, Mgr., 558 Fifth Ave., New York, has been granted a franchise to build gas works and operate the same to supply gas to the residents of Freeport.

NEW YORK, N. Y.—Mayor George B. McClellan has ordered that all bids be rejected for lighting the streets and public buildings of the city for the current year. New bids may be advertised. Frank J. Goodwin is Deputy Acting Comr., Water Supply, Gas and Electricity Dept.

UTICA, N. Y.—The Utica & Mohawk Valley Ry. Co. has purchased site for proposed power house.

PATERSON, N. J.—The Paterson Electric Light, Heat & Power Co. will establish a plant in this city. $100,000 has been subscribed. Peter S. Van Kirk, Henry F. Bell, James G. Blauvelt, Ralph Baer and others are interested.

READING, PA.—The Reading Iron Co. has invited bids on a power-house to be erected at Cedar St. and Pennsylvania Ry. Complete line of equipment probably will be required.

McCALL FERRY, PA.—Construction work probably will be resumed this spring on an electric power plant on the Susquehanna River, near this place. A dam, 32 feet high, is planned. Property, extending for five miles on both sides of the river, has been purchased from Milton F. Frey and Samuel D. Frey, H. W. McCall, Elias W. Urey and John Blair Estate.

CENTERVILLE, MD.—D. S. Pindell, of Sault Ste. Marie, Mich., is reported to have secured a franchise for the construction of an electric light and gas plant at Centerville.

WASHINGTON, D. C.—Following bids were received by District Commissioners March 20 for electric plant for sewage station: M. W. Hill & Co., Baltimore, Md., $10,490; D'Olier Eng. Co., Philadelphia, Pa., $12,300; McKay Eng. Co., New York, $13,305; W. M. Sheean & Co., New York, $13,768; Wallace Stebbins Co., $14,655; McCay Eng. Co., Baltimore, Md., $15,490; Bellman & Sanford, New York, $15,635; W. R. Muckle, Jr., Co., Philadelphia, Pa., $15,900; National Electric Supply Co., Washington, $16,-089; Johnston Livingston, Jr., Co., New York, $17,800.

DURHAM, N. C.—THE DURHAM TRACTION CO. has been given contract for city street lighting.

BIRMINGHAM, ALA.—City Council has granted the Birmingham Ry., Light & Power Co., a franchise to lay gas mains and construct an electric lighting system in West End.

HATTIESBURG, MISS.—Franchise for a gas plant has been awarded to J. L. Kearney, of Hattiesburg; H. L. McKee, of Meridian, and H. A. Camp, of Lumberton. Plant is to be erected within 18 months.

NEW ALBANY, MISS.—Bids are asked until April 6, instead of March 28, for construction of water-works and electric-light plant. W. F. Wilcox, Engr., Jackson, Miss. W. A. Liddell, Mayor. (Advertised, Engineering News.

AMITE CITY, LA.—H. C. Hull, of Amite City, Hyman C. Reed, of New Orleans, and others have been granted a franchise to erect an electric light and power plant here to furnish light, also for Roseland and Independence. Work has been started on the plant.

NEW ORLEANS, LA.—A Southern report states that the receivers of the New Orleans Railways Co. are arranging for extensive improvements at the power plant. The capacity will be increased and new equipment, including a smokestack and foundations, two additional boilers of 900 HP. each, two superheaters, two stoker equipments, flues, dampers, economizers, coal chutes, scales, ash chutes, ash hoppers, steam pipes and covering, to cost $110,000, will be installed; also a 2,550 three-phase 2,300-volt alternating machine and auxiliaries at a cost of $30,000. A. L. Block is Ch. Engr. and J. R. McGuerney is Purchasing Agt.

DICKSON, TENN.—Town will vote at election on March 25 on issuance of $6,000 of electric light plant bonds.

MEMPHIS, TENN.—We are informed by I. W. Uhlman, Secy. Merchants' Power Co., that a 30-year franchise has been granted this company to furnish light and power for Memphis. Company will be market for general equipment. Franchise grants right to build and operate both a gas and electric lighting and power system. Noted on Feb. 23.

OOLITIC, IND.—The Town Board is reported to have decided to construct combined water works and electric light plant. Probable cost, $23,000. Geo. C. Morgan, Chicago, Ill., is Engr.

LAFAYETTE, IND.—Isham Randolph, Engr. Sanitary Dist. of Chicago, Ill., in his report to the business men of Lafayette interested in plan to build a dam across Wabash River for generation of power, estimates the total cost of the dam, hydraulic and electrical equipment, at $248,000.

SAULT SAINTE MARIE, MICH.—The Edison, Sault Electric Co. has announced that a new plant will be started this year. Alexander Daw, Vice-Pres. Edison Illuminating, of Detroit, is interested. Prof. Tardner S. Williams, of University of Michigan, Ann Arbor, has prepared plans. About $125,000 will be invested this summer.

MORRIS, ILL.—The Field Electric Light Co. has plans for improvements to plant, it is said. P. Harney is Ch. Engr.

LINCOLN, ILL.—We are informed that the L. E. Myers Co., of Lincoln, will prepare plans for the new power plant for the Springfield & Northeastern Ry. Co. Bids will be received within several months. It is reported that plant will cost over $500,000. Noted on Jan. 26. C. E. Collins is Gen. Supt.

MILWAUKEE, WIS.—Milwaukee Light, Heat & Traction Co. has increased capital stock from $500,000 to $1,-000,000. C. J. Davison is Ch. Engr.

LA CROSSE, WIS.—Henry A. Salzer and J. G. Schweizer, representing the Wisconsin Light & Power Co., have accepted a franchise to build and operate an electric light plant within one year from Feb. 1, 1905.

ACKLEY, IA.—Smith Bros. will enlarge electric light plant operated here by them. Robert W. Smith is Supt.

JEWELL, KAN.—Bids are reported asked until May 15 for constructing an electric light plant, to cost $2,000.

CHEROKEE, KAN.—R. A. Long and L. N. Barnsdall, of the Kansas Natural Gas Co., have been granted a 20-year franchise to supply this town with natural gas.

FAIRMONT, NEB.—Bids are asked by Joseph Jackson, Cy. Clk., until 2 p. m., April 1, for the installation of gas-works, system and distributing mains and connection.

TEKAMAH, NEB.—City has voted to issue $10,000 of bonds for an electric light plant to be owned and operated by city.

STILLWATER, MINN.—The Stillwater Electric Light & Gas Co. is reported to have secured a 10-year franchise upon condition that the company construct a new coal gas plant by Sept. 1. A new system of incandescent lights for the streets is also to be provided. N. Johnson is Supt.

HARRISBURG, ARK.—Bids will be received about April 15, for the construction of an electric light plant for Harrisburg. Cost about $4,000.

SPRINGFIELD, MO.—The Springfield Gas & Electric Co. will erect a new gas receiver and storage tank, at cost of $30,000. P. A. Bertrand is Mgr.

BROWNSVILLE, TEX.—The People's Ice and Light Co. will erect an electric light plant here.

EMPIRE, COLO.—W. P. Clough, of Denver, Pres. Clear Creek County Power & Irrigation Co., states that it is proposed to construct a power plant, at a cost of about $75,000. Contracts will probably be let about May 1. H. R. Oliver, Georgetown, Colo., is Engr. Noted on March 2.

BLAINE, WASH.—City has granted an electric light plant and lumber mill franchise to H. L. Jenkins Lumber Co.

MODESTO, CAL.—Bids are asked until May 2, for a franchise to construct poles and string wires along county roads for transmitting electric current, as applied for by the Tuolumne Electric Co. J. B. Doyle, County Clk.

CORONA, CAL.—Contracts for gas plants at Monrovia and Anaheim have been awarded to BARTH & McGILLIVRARY, of Corona.

OCEAN PARK, CAL.—Bids for the purchase of a franchise to lay gas pipes in Ocean Park, will be received by the Board of Trustees until 7.30 p. m., April 10. Dana Burks, Pres.; T. G. Smith, Cy. Clk.

SAN FRANCISCO, CAL.—Beach Thompson, Pres. of the Stanislaus Electric Power Co., 328 Merchants Exchange Bldg., San Francisco, is reported now completing arrangements for the construction of power plant and transmission line which the company will build on the Stanislaus River, Tuolumne County, Cal. The water acquisition controlled by the company is estimated at 300 cu. ft. per second. It is intended to generate 24,000 HP. at the plant, and ultimately to build a transmission line about 130 miles long, which will convey the company's power to San Francisco. The San Francisco Coke & Gas Co., Leopold Michels, Pres., 17 Sansome St., will install a substation and an underground distributing system in San Francisco. About 18 miles of flume will be required by the Stanislaus Electric Power Co. to conduct the power water to the projected generating plant.

The Nevada Power, Mining & Milling Co., Rialto Bldg., San Francisco, has awarded contracts to the NATIONAL ELECTRIC CO., of Milwaukee, Wis., for two 750-KW. three-phase generators, for the new electric power plant at Bishop, Cal. Company has closed contracts with the PELTON WATER WHEEL CO., 121 Main St., for two impulse wheels which are to be direct connected to these generators and operated under a head of 1,020 ft. of water, the latter being taken from Bishop Creek. General Manager Hobbs of the Nevada Power, Mining & Milling Co., may be addressed, at 402 Rialto Bldg. R. M. Jones is Consulting Engr.

EPHRAIM, UTAH.—Electors have decided to issue bonds for $20,000 for a municipal light and power plant. J. P. Hansen, Jr., is interested.

WALLACE, IDAHO.—The Wallace Light & Water Co. will improve its plant this summer. A. G. Smith, of Spokane, Wash., is Secy. D. C. McKissick, Wallace, is Supt.

BRIDGES.

The names of parties awarded contracts are printed in capital letters.

HAVERHILL, MASS.—County Commissioners are considering plans for construction of a new bridge across Merrimac River at Haverhill, to cost $200,000. Address Wallace Bates, Chn., Salem, Mass.

BOSTON, MASS.—The Boston & Albany R. R. Co. has closed a contract with the BOSTON BRIDGE WORKS, 47 Winter St., Boston, for 3,000 tons of structural steel to be used in construction of bridge over Connecticut River at Springfield.

SPRINGFIELD, MASS.—Bids are asked by County Commissioners until April 8 for furnishing and erecting metal work of highway bridge over Connecticut River, between Chicopee and West Springfield. Plans on file in office of Engineering News, 220 Broadway, New York. Geo. F. Swain, Consult. Engr.; Robt. O. Morris, County Clk. (Advertised, Engineering News.)

LYME, CONN.—We understand that a new bridge will be erected by New York, New Haven & Hartford R. R. Co. across Connecticut River, at Lyme. R. N. Berrian, Asst. Engr. of Const., is in charge.

GOUVERNEUR, N. Y.—We are informed that the contract for constructing highway bridges over Oswegatchie River (bids opened March 20) was awarded to OWEGO (N. Y.) BRIDGE CO., for $14,980.

UPPER MARIBORO, MD.—Contracts for construction of three steel bridges in Prince George County has been awarded by Road Commissioners, as follows: YORK (Pa.) BRIDGE CO., bridge crossing Broad Branch Creek; same company, for bridge over Eastern Branch, at College Park, and CHAS. WHITE & CO., of Washington, D. C., for bridge crossing Folly Branch, near Buena Vista.

GASTONIA, N. C.—The County Commissioners have let contract for building iron bridge over south fork of Catawba River at Armstrong's Ford to the VIRGINIA BRIDGE & IRON CO., Roanoke, Va.

LONDON, TENN.—The contract for concrete piers for new bridge which Southern Railroad will erect over Tennessee River at London has been awarded to WALTON & WILSON CO., of Knoxville. Work will commence at once.

SOMERSET, KY.—It is stated that bids will be received by Cincinnati Southern R. R. Co. until April 1 for changing two bridges near Erlanger, Ky., to double-track steel bridges, at a cost of $350,000.

SMITHLAND, KY.—Bids are asked by Thos. Evans, County Judge, until April 5 for constructing a steel bridge over Phelps Creek, in Livingston County.

GRAFTON, O.—We are informed that the two-span concrete-arch to be erected by Cleveland, Cincinnati, Chicago & St. Louis R. R. Co. over Black River at this point will be constructed by company's forces. Est. cost, $10,000. Geo. W. Kittredge, Ch. Engr., Cincinnati.

INDIANAPOLIS, IND.—Bids are asked by County Commissioners until April 5 for construction of retaining wall to Fall Creek bridge, on White River, in Washington Township. Cyrus J. Clark, County Audr.

BLUFFTON, IND.—Bids are asked by C. S. Brineman, County Audr., until April 6 for constructing a 160-ft. iron bridge over Salamony River; also for constructing 15 concrete bridges.

NEW CASTLE, IND.—Bids are asked by County Commissioners until April 4 for constructing a 100-ft. steel bridge.

CRAWFORDSVILLE, IND.—We are informed that the contract for constructing bridge over Coal Creek has been awarded to THATCHER A. PARKER for $2,400, including fills.

Concrete arch on Danville Road has not yet been let. Jas. A. Harding, County Surveyor, Crawfordsville.

MT. VERNON, IND.—The contract for erecting five steel bridges in this county was awarded by County Commissioners to the VINCENNES (Ind.) BRIDGE Co. for $3,180.

MT. VERNON, IND.—The contract to erect a fill and bridge over Mill Creek at Eighth St., this city, was awarded the JOLIET (Ill.) BRIDGE CO. for $4,105.

BLUFFTON, IND.—The County Commissioners have postponed the letting of contracts for fourteen bridges, aggregating about $15,000. Proposals were to have been opened April 6, but will now be held off for a month or six weeks.

JACKSON, O.—Bids are asked by W. J. Schumate, County Audr., until April 13 for all labor and material necessary to construct substructure and superstructures of a number of bridges, together with a large number of culverts and sewers, all of which are to be made of concrete. J. W. Turner, County Surveyor.

DES MOINES, IA.—We are informed that the following were the lowest bidders for constructing two reinforced concrete arches at north end of Sixth Ave. bridge, also for two reinforced retaining walls: John Dean & Co., Chicago, Ill., $26,200; Wm. Harrabin, Iowa City, Ia., $29,900, and John Gilligan Co., Falls City, Neb., $31,988. John W. Budd, Cy. Engr.

DAKOTAH, IA.—Bids are asked by Board of Supervisors until April 5 for constructing bridge across Des Moines River, in Avery Township. John Cunningham, County Audr.

HUTCHINSON, MINN.—Bids are asked by City Council until March 29 for construction of a bridge across Crow River. The work will comprise one 51-ft. riveted steel truss bridge. Plans and specifications may be seen in office of Henry Braun, Cy. Clk.

ANOKA, MINN.—Bids are asked by County Commissioners until April 7 for construction of 50 ft. of new approaches with concrete or stone abutments, at St. Francis bridge, over Rum River.

ANACONDA, MONT.—County Commissioners have decided to ask for bids on a new bridge to be built over Mill Creek near here. The structure will be entirely of steel and will be 48 ft. long, with steel piers.

TOPEKA, KAN.—County Commissioners opened bids March 13 for constructing three steel bridges in county and rejected all bids. A. Newman, County Clk.

DEVIL'S LAKE, N. DAK.—Bids are asked by County Commissioner until April 3 for constructing four steel bridges. Emil S. Eich, County Audr.

WARRENTON, MO.—Bids are asked by A. W. Wehmeyer until April 6 for constructing a steel bridge 124 ft. long over Charrette Creek.

KANSAS CITY, MO.—Edgar A. Harper, Cy. Engr., writes us that the construction of Lydia Ave. viaduct is entirely in the hands of railroad companies over which the viaduct passes, and the Metropolitan Street Ry. Co., of this city. Mr. Harper further states that there is no probability that the contract will be advertised under which this construction is to be done inside of a year.

TILLAMOOK, ORE.—Bids are asked by County Court until April 10 for construction of bridge over North Nehalem River. Plans and specifications may be seen at office of County Clerk.

GOLDBEACH, ORE.—Bids are asked by County Commissioners until April 5 for rebuilding main span of Elk River bridge. Geo. W. Smith, County Clk.

SAN DIEGO, CAL.—City Council has ordered the construction of bridges across Rose and Tecolote Creeks, to cost, respectively, $2,015 and $900. G. A. D'Hemecourt is Cy. Engr.

LOS ANGELES, CAL.—The Seventh St. bridge over Los Angeles River, at this point, was destroyed by flood. Harry F. Stafford is Cy. Engr.

OAKLAND, CAL.—Board of Supervisors at a recent meeting decided to build a stone or concrete bridge across Sausal Creek in Brooklyn Township. Est. cost, $3,500.

FREDERICTON, N. B.—We are informed that the contract for rebuilding bridge over Northwest Miramichi River has been awarded to JOHN D. McLAUGHLIN for $15,375.

HAMILTON, ONT.—In connection with the Cataract Power Co.'s extension of the radial railway to Oakville this year nine double-track bridges will be required.

BERLIN, ONT.—Herbert J. Bowman, County Clk., informs us that R. BOYLE has contract for constructing superstructure of bridge over Grand River on line between Waterloo and Wellington Counties. Concrete pier to be built in middle of river will be advertised in May.

BUILDINGS.

The names of parties awarded contracts are printed in capital letters.

HARTFORD, CONN.—The Odd Fellows' Hall Association will erect a $100,000 building on Church St.

BOSTON, MASS.—Contract for new office building to be erected for State Street Trust Co., at corner of Massachusetts Ave. and Boylston St., has been let to L. D. WILCUTT & SON, Boston. Building will cost about $50,-000. Allen & Collins, Archs., Boston.

MONTICELLO, MISS.—Bids are asked by the Board of Supervisors of Lawrence county, until 1 p. m., April 8, for building a jail. B. C. Bynum, Arch., Montgomery, Ala. W. H. Speights, Chancery Clk.

WORCESTER, MASS.—Contract will be let about April 15 by Geo. H. Clemence for a lodge and store building for the Swedish Thule Music Hall Association. Est. cost, $80,000.

WEST POINT, N. Y.—Bids are asked by Quartermaster, U. S. M. A., until April 20 for erection of two double and four triple sets of officers' quarters and for erection of cadet barracks. (Advertised, Engineering News.)

NEW YORK, N. Y.—Kirby, Petit & Green, Archs., 23 West 34th St., are preparing preliminary plans for William R. Hearst for building to replace the Virginia Hotel, Grand Circle, 8th Ave. and 58th St. It will be occupied by the "New York Journal."

THE BUCKLEY REALTY CONSTRUCTION CO. was awarded contract for Public School No. 16, Boro. Richmond. Company was erroneously noted last week as Buckley Realty Co.

GEO. A. VARNEY & CO., 156 Fifth Ave., have general contract for building new Shayne building on 42d St. It will cost $100,000. Sub-bids, we are informed, will be received. W. L. Genck is Supt. in charge. A. S. Gottlieb, 156 Fifth Ave., is Arch. Noted last week.

NEW YORK, N. Y.—Bids are asked until April 3, 11 a. m., for iron stairways, etc., at Public Schools Nos. 1, 8, 12 and 14, Boro. Brooklyn.

Bids are asked until March 27, 11 a. m., for installing equipment in School No. 64, on East Ninth and Tenth Sts., Boro. Manhattan. Also for general construction of School No. 33, at Washington Ave. and Thompson St., Grant City, Boro. Richmond. C. B. J. Snyder, Supt. School Bldgs.

Plans have been filed by Ralph C. Gildersleeve, Arch., 27 West 30th St., for a 12-story addition to hotel at 14 East 60th St., for Alpha Realty Co., 29 Broadway. Cost, $220,000.

The "Tribune" will build a 9-story addition to building at Nassau and Spruce Sts. D'Oench, Yost & Thouvard, 2-9 Fourth Ave., are Archs. A 19-story annex will be built at 5-9 Frankfort St. Est. cost, $600,000.

Louis F. Haffen, Pres. Bronx Boro., will erect a clubhouse at Elton Ave. and 159th St., for the Jefferson Tammany Club. It will cost $75,000.

NEW YORK, N. Y.—Bids are asked until March 28, 10 a. m., for erecting building for engine company No. 6, on Liberty St. Nicholas J. Hayes, Fire Comr.

JERSEY CITY, N. J.—Court of Errors and Appeals, at Trenton, has decided that proposed Hudson county courthouse, if built, may cost about $2,800,000. A decision of Supreme Court fixed limit at $900,000. Commission consists of Frederick Rippe, A. J. Clements and William E. Smith.

CAMDEN, N. J.—Bids were received on March 15 for the jail equipment of new building. (1) For the reinstalment of the 72 cells now in use and 20 new ones; (2) reinstalment of the old cells and 40 additional new ones; (3) a complete outfit of 130 new cells. Lowest bidders were: E. F. Smith Fire Proof Construction Co., of Washington, D. C., (1) $24,488.63, (2) $31,953.83, (3) $41,410; Van Doren Iron Co., Cleveland, O., (1) $21,235, (2) $28,537, (3) $48,678.

PHILADELPHIA, PA.—Duhring, Okie & Ziegler, Archs., 1418 South Penn Sq., are preparing plans for an addition to Howard Hospital at Broad and Catharine Sts.

A. R. RAFF, 1635 Thompson St., has been awarded contract for building the German theater at Girard Ave. and Franklin St. Cost, $130,000.

It is reported that the contract to erect the Southern manual training school has been secured by CRAMP & CO., 1421 Filbert St., at $361,937.

An annex to the Girls' Commercial High-school at Broad and Green Sts. is under consideration. $353,000 has been appropriated.

POTTSVILLE, PA.—A. F. Smith, 529 Court St., Reading, has prepared plans for an office building for the Philadelphia & Reading Coal & Iron Co., which will cost about $150,000.

OIL CITY, PA.—THE AJAX CONSTRUCTION CO., of Pittsburg, has been awarded the contract for the erection of 6-story Chambers block, at $66,800.

CHELTENHAM, PA.—The School Board of Cheltenham Township has awarded the contract for the erection of the new high-school building at Elkins Park to HENDERSON & CO., LTD., of Philadelphia, at $68,222.

PITTSBURG, PA.—John F. Sweeny, of the Home Trust Co., has let contract for erection of 40 frame dwellings to JONES & LASH. Buildings will be erected on Southern and Boggs Aves., Mt. Washington, at cost of $100,000.

FORT HOWARD, MD.—Bids are asked by Capt. Wm. M. Cruickshank, Q.-M., until 1.30 p. m., March 24, for construction of frame boat-house for submarine mine service.

BALTIMORE, MD.—Contract for Keyser office building, at Calvert and German Sts., has been awarded to BRODERICK & WIND, of St. Louis. It will be ten stories high. Wyatt & Nolting are Archs.

BALTIMORE, MD.—We are informed by Simonson & Pietsch, Archs., Baltimore, that bids will be received March 31 for office building for the U. S. Fidelity & Guaranty Co. It will be seven stories high, 70 × 93 ft., fireproof throughout. Estimated cost, $160,000. Building is to have two elevators, electric fittings, steam-heating, Indiana limestone front, steel frame, terra-cotta floors and partitions, marble wainscot and floors.

Contract will be let this week by Delano & Aldrich, Archs., 9 East 41st St., New York, for proposed Waters Art Gallery, to be erected at Washington Pl. and Center St.

Geo. K. McGaw, of the Acker, Merrall & Condit Co., 220 North Charles St., is said to have purchased the property at Charles and Mulberry Sts., upon which will be erected a 6 or 8-story store and office building. Cost of building will be about $200,000.

WASHINGTON, D. C.—Contract for stonework for House of Representatives office building has been awarded to B. A. & G. N. WILLIAMS, 4 East 42d St., New York, we are informed, at about $1,000,000.

WASHINGTON, D. C.—Bids are asked until April 11 for furnishing and delivering at new building for National Museum, white bricks for construction of courtyard walls. Bernard R. Green, Supt. Construction. (Advertised, Engineering News.)

RICHMOND, VA.—Competitive designs will be received by C. P. Walford, Clerk and Supervisor, 2 City Hall, until April 17, for new high-school building. All designs are to be accompanied by general plans and specifications.

HUNTINGDON, W. VA.—C. L. Ritter, G. N. Biggs, C. W. Watts, L. H. Cox, George F. Miller and associates will organize the Central Realty Co. This company will erect a 5-story brick and stone hotel, to cost $225,000. Plans have been prepared by J. B. Stewart, P. O. Box 452.

CHARLESTON, S. C.—Bids are asked until April 5 by Dr. R. S. Cathcart, Chn. Bldg. Com., Medical Society of South Carolina, at the office of Henry F. Cook, Supt. Construction, Calhoun and Lucas Sts., for the erection and completion of Roper Hospital buildings.

ANNISTON, ALA.—Plans by Breeding & Whildin, Birmingham, Ala., have been adopted for proposed building for the Alabama Presbyterian College. Building is to be three stories, 200 × 300 ft., of brick and stone. Cost, about $100,000. Dr. Stagg, of Birmingham, is Chn. Com.

KNOXVILLE, TENN.—W. J. Oliver has had plans prepared by Frank P. Milburn, Arch., Columbia, S. C., for a 10-story hotel, which will cost about $400,000.

MEMPHIS, TENN.—Alsup & Wood, 544 Randolph Bldg., have prepared plans for the Goodwin Institute, to cost $350,000.

CHARLOTTE, N. C.—T. W. Hawkins and associates are having plans prepared by W. F. Denny, Arch., Prudential Bldg., Atlanta, Ga., for a 6-story hotel, 98 × 160 ft., to cost about $200,000.

ATLANTA, GA.—T. H. Morgan, of Morgan & Dillon, Archs., Prudential Bldg., Atlanta, is preparing plans for $100,000 building by the Masonic Temple Co.

JACKSONVILLE, FLA.—Rutledge Holmes, West Bldg., is architect for proposed Pythian Castle, to be erected here.

SHREVEPORT, LA.—The W. K. Henderson Iron Works & Supply Co., Ltd., is reported to be in market for plans and bids for a fireproof 4-story building, 60 × 150 ft., for heavy mill supplies. W. K. Henderson is Pres.

GLASGOW, KY.—Bids are asked until March 31 for building jail and jailer's residence. G. M. Bohannon, Comr.

MORGANFIELD, KY.—Bids are asked by A. W. Clements, county judge, until March 31 for painting courthouse and jail. Specifications at office of G. T. Berry, County Attorney.

PORTSMOUTH, O.—Richards, McCarthy & Bulford, Archs., The Ruggery, Columbus, have been commissioned to prepare plans for the Holy Redeemer Church. Cost, $100,000. Same architects are preparing plans for Carnegie library here.

TOLEDO, O.—The National Land & Investment Co., in which George G. Metzger is interested, will erect an 8-story apartment house and commercial building at Spielbusch, Canton and Shepard Sts., at cost of $125,000. Walter Hudson is Arch., the Valentine Bldg.

CINCINNATI, O.—J. G. Schmidlapp will erect a memorial library and museum building, to cost $100,000, in Eden Park. D. H. Burnham, Chicago, is Arch. HENNESSET BROS., Chicago, have contract.

TERRE HAUTE, IND.—Bids are asked until noon, March 30, for a 4-sty 150-room hotel, 80 × 170 ft., for the Plana Hotel Co. Gault & Gault, Vincennes, Ind., are Archs.

ANN ARBOR, MICH.—Plans have been prepared for new high-school building. Estimated cost is $230,000. It will be three stories high, 240 × 200 ft.

CHICAGO, ILL.—William F. Grower is to build a 10-story warehouse, costing $250,000, at Madison St. and Chicago River.

W. L. Bush will erect an apartment house at Dearborn Ave. and Division St. It will be eleven stories high, and will cost $700,000.

Max Tich and Carl Roessler are having plans prepared for a 12-story building at 260-264 Clark St. It will be used as an addition to the Kaiserhof Hotel and Restaurant. It will be in the French Renaissance style of architecture; front of stone, brick and terra cotta. Cost, $250,000.

Property at Wabash Ave. and Madison Ave., owned by Mark Skinner Estate, will be sold at auction at Real Estate Board on March 25. An $800,000 building will be erected to replace present one.

P. J. Weber, Arch., Fisher Bldg., has plans for a 4-story building, which will cost $100,000, to be erected by La Verne W. Noyes at Lake Shore drive and Elm St.

Webster Tomlinson, Arch., has prepared plans for a building to be used for warehouse and manufacturing purposes, to be built on Jackson Boulevard, east of Halsted St., for Frederick W. McKinney. It will be 8 stories, 123 × 178 ft., of fireproof construction, with pressed brick front, composition roof; steam heat. Estimated cost, $300,000.

CHICAGO, ILL.—Bids are asked by the Department of Public Works, 222 City Hall, until 11 a. m., April 1, for the construction of caisson foundations for a 10-story fireproof commercial building, to be erected at 276-286 East Madison St. F. W. Blocki, Comr. of Pub. Wks.

MANITOWOC, WIS.—Award of the contract for removing the old court-house, in preparation for the erection of the new $150,000 edifice, has been made to H. BUESTRENS & SONS, of Milwaukee, at $3,960.

OSKALOOSA, IA.—The time for opening bids for the construction of new city hall, to be built at Oskaloosa, has been extended to April 3d. S. R. Crissy, Cy. Clk.

CLINTON, IA.—Bids are asked until April 6 for: (1) basements of new church and rectory; (2) superstructure of church; (3) superstructure of rectory; (4) complete construction of church and rectory. Rev. J. A. Murray, pastor.

MINNEAPOLIS, MINN.—The Hale Homeste[illegible] has let the contract to PIKE & COOK for the er[illegible] of a 5-story and basement building at 417-29 First A[illegible] south. It will be of brick, mill construction, 132 × 157 [illegible] Sedgwick & Saxton are Archs. Cost, $100,000.

Contract for building new armory was awarded [illegible] JOHN PARTEN, of St. Paul, at $113,000. ALLAN BL[illegible] CO., of St. Paul, was awarded plumbing and heating [illegible] tract.

OMAHA, NEB.—Fisher & Lawrie, Archs., [illegible] Paxton Bldg., will receive bids on general contract ab[illegible] May 1 for a 5-story and basement building, 132 × 1[illegible] for the Y. M. C. A., of which B. C. Wade is Secy. [illegible] cost, $200,000.

ST. LOUIS, MO.—THE HIRAM LLOYD B[illegible] DING CO., 816 Olive Ct., has secured the contract for [illegible] erection of Shields school. THE KELLERMAN CO[illegible] RUCTION CO., 510 Pine St., has the contract for [illegible] room addition to Dessalines school. The total cost o[illegible] two contracts aggregate about $191,265.

J. J. Hannerty, of Century Theater, will have [illegible] prepared for a theater to cost about $100,000. It wi[illegible] built at Grand Ave. and Morgan St. Barnett, Hayn[illegible] Barnett, Frisco Bldg., probably will be the architect[illegible]

A syndicate, represented by M. Greenwood, [illegible] has purchased the St. Nicholas Hotel property at $70[illegible] and it is stated it will be extensively improved at [illegible] of $300,000.

The building committee of the board of edu[illegible] has received bids for two new schools. The lowe[illegible] ders were as follows: Elleardsville school—General w[illegible] E. C. Gerhard, $140,450; plumbing, Philip C. Ring, [illegible]; heating and ventilating, B. F. Sturtevant & Co., [illegible]; total, $167,353. Franz Sigel school—General work, Fred Boeke, $127,800; plumbing, Fink & Schuster Plumb[illegible] Co., $9,770; heating and ventilating, B. F. Sturtevant & Co., $16,400; total, $153,970. Equipment for the teach[illegible] college, Joseph Loughmann, $6,672.

ST. JOSEPH, MO.—Bids are asked until 10 a. m., March 27, for construction of new dome on Buchanan county court-house. Eckel & Mann, Archs.

COLORADO SPRINGS, COLO.—Thomas Barber, Arch., Bank Bldg., will receive bids, it is said, for a $75,000 bath house.

DENVER, COLO.—Contract for a 6-story building to be erected at 15th and Arapahoe Sts. has been let by Gove & Walsh, Archs., McPhee Bldg. Edwin Hewitt is owner. Cost, $125,000.

SPOKANE, WASH.—John K. Dow, Arch., Empire State Bldg., is preparing plans for a new Y. M. C. A. building, to cost $125,000.

LOS ANGELES, CAL.—THE HENRY R. ANGEL CO. has secured the principal contract for erection of the Home Laughlin Building on Hill St., between Third and Fourth Sts. It will be 207 × 121 ft., eight stories, reinforced concrete construction, fireproof. Cost, $150,000.

OAKLAND, CAL.—We are informed by P. L. Wheeler that contracts for Samuel Merritt hospital probably will be let in April. No elevators or engines will be needed. Gas and electric lighting and hot water heating apparatus will be installed. Two buildings, a ward building and operating building, will be erected. They will be 40 × 41 ft. and 43 × 106 ft., respectively; fireproof, two stories and basement and one story and basement; brick, with stone trimming. Kendall, Taylor & Stevens, 93 Federal St., Boston, are Archs. Estimated cost, $80,000; equipment, $10,000.

SAN FRANCISCO, CAL.—Contracts have been let by the Hahnemann Medical College for the erection of a new hospital building at California and Maple Sts. It will cost about $120,000. H. H. Meyers and C. R. Ward are the architects.

D. H. Burnham & Co., Archs., Chicago, L. B. Dutton, local manager, have prepared plans for the remodeling of the Chronicle building and the construction of a 16-story annex. Two stories will also be added to the original building at Market and Kearny Sts. The annex will have a frontage of 65 ft. on Kearny St., with a depth of 50 ft., leaving an irregular-shaped court between the two buildings. THE AMERICAN BRIDGE CO. has secured the contract for the structural steel required for the frame work. Large quantities of pressed brick and terra cotta will be used. Work will soon be commenced on the improvements.

The Pacific States Telephone & Telegraph Co., 216 Bush St., John I. Sabin, Pres.; Louis Glass, Gen. Mgr., will soon receive bids for about 160 tons of structural iron and steel, including steel beams for the new 4-story and basement building which is to be erected on New Montgomery St., between Mission and Howard Sts. A. A. Cantin, 217 Crossley Bldg., is the architect for all of the company's new buildings in San Francisco and vicinity.

WINNIPEG, MAN.—Bids are asked by J. E. Schwitzer, Division Engr., Canadian Pacific Ry., until March 25, 6 p. m., for construction of 12 section houses on stone foundations; 13 section houses on posts and sills; two freight sheds; 16 portable stations; three pump houses; combined station at Balmoral; boiler house; 14 tool houses, etc.

TORONTO, ONT.—Bids are asked until March 29 for building substructure of St. Patrick's church. A. W. Holmes, Arch.

WATER SUPPLY AND IRRIGATION.

The names of parties awarded contracts are printed in capital letters.

AUGUSTA, ME.—Bids are asked by Trustees, Augusta Water District, until April 10 for laying a cast iron pipe line about 8½ miles long, with appurtenances, from Carleton Pond to distributing reservoir. W. B. Getchell, Engr. (Advertised, Engineering News.)

SANFORD, ME.—Sanford Light & Water Co. is reported to have signed contract with L. N. FARNUM, 53 State St., Boston, Mass., for construction of 1,000,000-gallon concrete reservoir.

WILTON, N. H.—We are informed that town has voted to extend its water system to the Hillsboro Mills and has appropriated $3,000 for this purpose. Isaac S. Whiting is W. Comr.

NORTH ANDOVER, MASS.—We are informed that bids will be taken June 1 for cross-compound condensing fly wheel pump of capacity of 1,500,000 gallons. Clarence Goldsmith, Supt. W.-W.

BRIDGEPORT, CONN.—Bridgeport Hydraulic Co. has awarded contract to D. B. PIERCE CO., Bridgeport, for excavation of basin of reservoir of the company and removal of muck, loam, etc.

MEDINA, N. Y.—We are informed that contract for municipal water-works for this place (bids received March 1) have been let as follows: Construction, L. J. RICHARDSON & CO., Owego, N. Y; pipe and special castings, CHAS. MILLER & SON CO., Utica, N. Y.; hydrants and valves, EDDY VALVE CO., Waterford, N. Y. J. F. Whitmer, Buffalo, N. Y., is Consult. Engr.

SYRACUSE, N. Y.—We are informed that city contemplates building new conduit from Skaneateles Lake to city, with capacity equal to present conduit. F. J. Schnauber is Cy. Engr.

CALLICOON DEPOT, N. Y.—Contract for constructing water-works at this place for Callicoon Water Co. (bids received March 10) has been awarded to O'HELIRER-BROOKS CO., Warwick, N. Y., for about $9,000. E. W. Mo[illegible], Jefferson, N. Y., is Engr.

L[illegible]VILLE, PA.—We are informed that iron pipe and hydrants will be required for projected fire protection system, estimated cost of which is $4,000. Borough has purchased plant of Citizens Water Co., and will use its earnings to install fire protection system. It will be about four years before this is done. A. L. Vandervous, Pres. Council.

SHIPPENSBURG, PA.—Borough invites inspection of newly constructed concrete reservoir, which fails to hold water owing to its situation on a limestone hill, and will receive competitive bids for making it water tight. Communications will be received by President or Clerk of Council up to April 1. (Advertised, Engineering News.)

NEW CASTLE, DEL.—Delaware Water Improvement Co. is stated to have awarded contract for its new water and electric light plant in this city to H. E. AHREN & BRO., Reading, Pa.

BALTIMORE, MD.—Bids are asked by Board of Awards, E. Clay Timanus, Pres., until March 29, for furnishing and delivering complete, ten 16-in. and twelve 20-in. water valves. Alfred M. Quick, Water Engr.

MANCHESTER, VA.—Water Commissioners have awarded contract to J. L. LINDSAY, Richmond, Va., for water system extension, subject to approval of council. $2,500 was appropriated for new boiler and two pumps, but additional appropriation is required.

WHEELING, W. VA.—Packing firm of F. Shenk & Sons is reported to have let contract to MINER BROS., Benwood, W. Va., for completion of 1,000,000-gallon pumping station at its Fulton plant.

WASHINGTON, D. C.—Bids are asked by Commissioner of Fisheries, Department of Commerce and Labor, until April 12 for construction of pump house at U. S. Fish Ponds, Monument Lot, Washington.

CHARLOTTE, N. C.—Contract for erection of new city stand-pipe has been let to R. D. COLE MFG. CO., Newnan, Ga., for about $15,000.

WILTON, N. C.—We are informed that this town desires services of hydraulic and electrical engineering expert. Doane Herring is Mayor.

ALEXANDRIA, LA.—Contract for sinking artesian well for city is stated to have been let to PATORNO & CO., New Orleans, La., for $3,500.

NEW ORLEANS, LA.—Bids are asked by Sewerage and Water Board, F. S. Shields, Secy., until May 11 for connecting certain water pipe at five points with Chestnut St. main of New Orleans Water Co.

NEW ALBANY, MISS.—Time for receiving bids for construction of water-works and light plant for this town has been changed from March 28 to April 6, as is noted in our advertising columns.

LUMBERTON, MISS.—Bids are asked by Town of Lumberton, H. A. Camp, Mayor, until 3 p. m., and by Town of Poplarville, D. F. Archer, Mayor, until 7.30 p. m., April 4 for drilling 8-in. artesian well. R. C. Huston, Laurel, Miss., is Engr.

ELLISVILLE, MISS.—Bids are asked until April 4 for construction of water-works. Wm. F. Wilcox, Engr., Jackson, Miss.; W. M. Hardee, Cy. Clk.; W. V. Walters, Mayor. (Advertised, Engineering News.)

CLARKSVILLE, TENN.—Bids are asked by Water Committee, Z. Dean, Chn., until April 3 for vertical, duplex compound condensing, outside packed plunger engine of 2,000,000 gallons capacity daily.

NASHVILLE, TENN.—Board Public Works has awarded contract for furnishing about $12,000 worth of 6-in. cast-iron water mains to U. S. CAST-IRON PIPE & FOUNDRY CO.

MEMPHIS, TENN.—Bids are asked by Memphis Artesian Water Department, Lawrence Simpson, Supt., until 12 noon, March 27, for furnishing 700 ft. 14-in. O. D., standard steel drive pipe, 2,700 ft. 10-in. standard steel drive pipe, with couplings and thread protectors. Bids are also asked for 615 tons 4-in. to 16-in. cast-iron pipe.

CANTON, O.—Bids are asked by Board Public Service, Chas. A. Zellars, Clk., until April 3, for construction of pumping station; est. cost, $25,000. J. M. Bostick, Massillon, O., is Arch.

MANSFIELD, O.—We are informed that Board Public Service, J. M. Ottinger, Secy., is taking bids until March 25 for pipe for extensions of city mains. Estimated cost of improvement is $6,000.

NORTH AMHERST, O.—We are informed that Chapin & Knowles, Consult. Engrs., Frick Bldg., Pittsburg, Pa., will make preliminary surveys for new municipal water-works for this city. Supply is to be from lake, three miles distant, and estimated cost of works is $35,000. A. Baker is Mayor.

PERRYSBURG, O.—T. M. Franey, Village Clk., writes us that city will vote April 22 on issuing $30,000 of bonds for water-works. Nothing definite will be done until the vote is taken.

CLEVELAND, O.—We are informed that all bids received Feb. 24, by Department of Public Service, Division of Water, E. W. Bemis, Supt., for furnishing water meters were rejected and new bids are being taken until March 29 for 10,000 ⅝-in. meters.

MENDON, MICH.—We are informed that this city has voted bonds for a system of water-works.

WATERMAN, ILL.—We are informed that contract for installing compressed air water system for this city has been let to NATIONAL CONSTRUCTION CO., South Bend, Ind., for $4,547. Bids were received Feb. 28. S. M. Henderson, Village, Pres.

CHICAGO, ILL.—Bids are asked by Department of Public Works, F. W. Blocki, Comr., until March 31 for furnishinging and delivering the following quantity of cast-iron pipe: 500 pieces 4-in., 2,000 pieces 6-in., 4,000 pieces 8-in.; 500 pieces 12-in., 1,000 pieces 16-in., 1,100 pieces 24-in. and 1,513 pieces 36-in.

CHICAGO, ILL.—Bids are asked by Department of Public Works until April 3, for designing, furnishing and erecting in the 68th St. pumping station, four internally fired, horizontal return tubular boilers, fitted with stokers and all necessary appurtenances. F. W. Blocki, Comr.

HUMANSVILLE, MO.—This town will receive bids soon on $12,000 water-works bonds. Plans and specifications for the work are being prepared by Burns & McDonnell, Consult Engrs., Kansas City, Mo.

McMINNVILLE, ORE.—H. T. Maloney, Cy. Recdr., writes us that the taxpayers will vote April 10 on a bond issue of $80,000. If proposition carries surveys and estimates will be made for new municipal water-works. It is hoped to have the plant installed by next winter. Supply is to be from creek, 7¼ miles distant, and it is proposed to have a reservoir two miles from city. Geo. C. Mason, Portland, Ore., probably will be engineer.

DENVER, COLO.—Bids are asked by U. S. Reclamation Service, Chamber of Commerce Bldg., Denver, until May 16 for construction of about 45 miles of main canal, involving about 2,800,000 cu. yds. earthwork and 150,000 cu. yds. rock work, for irrigation of lands in the North Platte Valley. Bids will be received on one or more divisions, which will approximate 300,000 cu. yds. each. (Advertised, Engineering News.)

MONTROSE, COLO.—Specifications for the construction of a water supply system for this town may be seen at the office of Engineering News, 220 Broadway, New York. Bids for the work are asked until April 1 as is advertised in Engineering News. The town will also receive bids until April 1 for a $100,000 issue of water bonds.

TACOMA, WASH.—We are informed that matter of water extension has been postponed by Council. City will probably decide to construct a gravity system, as the suggested air lift well proposition appears to be too expensive to operate. Frank L. Davis is Cy. Engr.

SEBASTOPOL, CAL.—We are informed that no date has been set for opening bids, nor has bond election been held for proposed municipal water-works. Estimated cost of works, supply for which is to be from wells, is $35,000. System will require 212,000 gallon reservoir; two compound duplex pumps, of 500 gallons capacity per minute; two 50-HP. oil burning boilers, 1,250 ft., 12-in., 3,300 ft. 8-in., 9,800 ft. 6-in., and 22,000 ft. 4-in. pipe; valves, hydrants, meters and specials. N. S. Frost, Cy. Engr., Petaluma, Cal., is Des. Engr., and official in charge.

SANTA ROSA, CAL.—We are informed that city will vote March 28 on bond issue of $200,000 to be used for the following purposes: Improvement of water-works, $72,500; completing sewer system, $72,500; streets, bridges, etc., $50,000. Nothing can be done until after the election. L. E. Ricksecker, Cy. Engr.

PRESCOTT, ARIZ.—Bids are asked by Mayor and Common Council, until April 3, for furnishing horizontal, double-acting, triplex plunger outside packed water pump of capacity of 350 gallons per minute; 200-HP. boiler and setting; a 120 HP. horizontal compound condensing Corliss condensing steam turbine or internal combustion steam engine, and a 86-ft. diameter, 25-ft. high steel reservoir. E. B. Moden, Cy. Clk. Further data for the above work may be seen at office of Engineering News, 220 Broadway, New York.

ST. JOHNS, N. B.—Bids are asked until April 12 for construction of water-works extension, which will be let in four contracts as follows: 10,300 ft. 33-in. woodstave pipe line and accessory structures; 7,400 ft. 39-in. reinforced concrete aqueduct; 7,500 ft. 48-in. reinforced concrete aqueduct (part in tunnel); concrete masonry dam on Mispec River (with headworks and gate house). Walter W. White, Mayor. (Advertised, Engineering News.)

VICTORIA, B. C.—Bids are asked by Wm. Northcott, Purchasing Agent for city, until March 27 for supplying certain water meters.

SEWERAGE.

The names of parties awarded contracts are printed in capital letters.

WILTON, N. H.—We are informed that this town has voted to construct a house sewerage system, and has appropriated $15,000 for the work. Isaac S. Whiting, Starr B. Center and Chas. E. Weeks, Water Comrs., are in charge. A. W. Dudley, 936 Elm St., Manchester, N. H., is Engr.

BEVERLY, MASS.—Council has appropriated $30,000 for construction of sewers in Cabot and Balch Sts. Wm. J. Berry is Cy. Engr.

FRANKLIN, MASS.—Town may vote March 24 on extending sewer system and constructing sewer beds.

WEBSTER, MASS.—New sewer may be built in North Main St. Chas. Haggerty is Chn. Sewer Comrs.

SYRACUSE, N. Y.—We are informed that bids will be asked soon for construction of 10th Ward sewer system, which is to consist of 36-in. and 15-in. pipe sewers. Estimated cost is $30,000. F. J. Schnauber is Cy. Engr.

ATLANTIC CITY, N. J.—Bids are asked by city clerk until March 27 for constructing inlets and drains for this city. J. W. Hackney, Cy. Engr.; Edward S. Johnson, Street Committee. (Advertised, Engineering News.)

ASBURY PARK, N. J.—State Sewage Commission has approved plans for new sewage disposal plant here to cost about $40,000. Septic tank system will be used.

NEWARK, N. J.—Edward S. Rankin, Engr. Department of Sewers and Drainage, has submitted to Board of Works a report on sewers proposed for the Silver Lake section of this city. Three plans were proposed, estimated cost of work varying from $36,350 to $21,935.

DRAVOSBURG, PA.—Bids are asked until March 28 for constructing brick sewer in McClure St. and two terra cotta sewers in Maple and Duquesne Aves., respectively. White & Weimer, Boro. Engrs., 424 Fourth Ave., Pittsburg, Pa.; Courtney L. Whitaker, Boro. Clk.

HARRISBURG, PA.—Bids are asked by Highway Department, J. Austin Brandt, Comr., until 12 noon, March 25, for constructing 12-in. terra cotta sewer in Howard Ave.

AMHERST, VA.—L. S. Randolph, Consult. Engr., Blacksburg, Va., will prepare plans for a system of sewers and a sewage disposal plant for Sweet Briar Institute, at Amherst.

NEWPORT, KY.—J. B. Morlidge, Cy. Engr., is stated to be preparing preliminaries for construction of number of new sewers for this city.

CINCINNATI, O.—Bids are reported asked until April 10 for construction of several sewers. Geo. F. Holmes, Cy. Clk.

COLDWATER, O.—All bids are stated to have been rejected for construction of sewer system for this place. Town may employ superintendent and do the work itself.

WARREN, O.—It is proposed to construct trunk sewer in Mahoning Ave., at cost of $8,000. 6,500 ft., 12-in. sewers are to be constructed in other streets. E. M. Milligan is Cy. Engr.

SPRINGFIELD, O.—Election may be held early in May to vote on $225,000 bond issue for construction of sewerage.

YOUNGSTOWN, O.—Frank M. Lillie, Cy. Engr., has prepared plans and estimates for sewers in Iron, Pine and Jefferson Sts. and Chicago Ave.

GREENSBURG, IND.—This city, according to reports, is to construct general sewer system at a cost of about $150,000.

LAFAYETTE, IND.—Prof. C. V. Seastone has been preparing plans and specifications for Quincy St. sewer line for town of West Lafayette.

MENOMINEE, MICH.—Bids are asked until April 10 for constructing sewers in several streets. Fred. S. Norcross, Cy. Clk.

DIXON, ILL.—Bids are asked until March 24, 2 p. m., for construction of sanitary sewers. I. F. Edwards, Pres. Bd. Local Improvements.

DES MOINES, IA.—Bids were received March 11 by Board Public Works for constructing Ingersoll Run Sewer, the three lowest bidders being as follows: Wm. Horrabin, Iowa City, Ia., $33,459; J. W. Turner, Des Moines, $35,972; Des Moines Bridge & Iron Works, Des Moines, $36,418. In our issue of March 16 we stated that the contract had been awarded to Wm. Horrabin. Later reports, however, state that he withdrew from the work, owing to an error in his figures.

GRINNELL, IA.—Bids are asked until April 3 for 3,000 ft. sewer extension. J. F. Wilson, Cy. Clk.

SHELDON, IA.—Plans are on file with G. T. Wellman, Cy. Clk., for $33,000 sewer system. J. B. Frisbee, Des Moines, Ia., was Engr.

NEVADA, MO.—City votes to issue $10,000 of sewer bonds.

WATERTOWN, WIS.—Contract for constructing pipe sewers in three streets has been let to E. L. BARTLETT, Watertown, for $2,197. Bids were received March 18. E. B. Parsons is Cy. Engr.

MUSCATINE, IA.—Council has rejected all bids received for construction of Papoose sewer extension, and has ordered city engineer to receive new bids until March 27. Davenport Construction Co., at $9,608, was low bidder. Robert McNutt is Mayor.

DENVER, COLO.—Contract for constructing sewer in Sub-District No. 12 (bid received March 13) has been let to DENVER & PUEBLO CONSTRUCTION CO., for $4,762.

SANTA ROSA, CAL.—We are informed that city will vote March 28 on a $200,000 bond issue; of this sum $72,500 will go for completion of sewer system. L. E. Ricksecker, Cy. Engr.

OGDEN, UTAH.—We are informed that a notice of intention has been ordered published by the City Council to build sewers at an estimated cost of $110,000. If notice carries and bonds are voted the system will probably be built, but it will be some time before bids are called for. A. F. Parker is Cy. Engr.

STREETS AND ROADS.

The names of parties awarded contracts are printed in capital letters.

SPRINGFIELD, MASS.—Bids are asked by A. A. Adams, Supt. Sts. and Sewers, 43 Bridge St., until March 27, 4 p. m., for furnishing trap rock, cement, sidewalk, cross-walk, sewer and well brick, castings, coal, hardware, curbing and vitrified clay pipe.

CORNWALL, MASS.—No bids were received by Board of Selectmen March 9 for grading four sections of road in town of Cornwall. John E. Calhoun, First Selectman.

BOSTON, MASS.—Bids are asked by Massachusetts Highway Commission, 20 Pemberton Square, Boston, until March 30 for building a section of state highway about 6,000 ft. in length in town of Chilmark.

IPSWICH, MASS.—At a recent town meeting held here $8,000 was appropriated for highways. Chas. W. Bamford is Town Clk.

TROY, N. Y.—Bids are asked by Board Contract and Supply until March 28, at 11 a. m., for labor and material required for curbing, grading, regulating and paving roadway of 15th St. with vitrified brick on concrete foundation.

Bids are asked at the same time and place for labor, services and materials required in Department Public Works in the repair of pavements, sewers, bridges, highways, etc. James M. Riley, Clk.

CORTLAND, N. Y.—It is reported that bids will be received by Board Public Works until April 3 for macadamizing of Tompkins St.

SYRACUSE, N. Y.—Bids are asked by Board of Contract and Supply until March 27, at 1.30 p. m., for furnishing materials and paving Mark Ave. and Hamilton St. with asphalt sheet or asphalt block or vitrified brick. Geo. J. Metz, Cy. Clk.; Frank J. Schnauber, Cy. Engr.

NEW YORK, N. Y.—Bids are asked by John F. Ahearn, Pres. Boro. Manhattan, until March 29, at 3 p. m., for regulating and repaving on portions of several streets.

LONG ISLAND CITY (L. I.), N. Y.—Bids are asked by Jos. Cassidy, Pres. Boro. of Queens, until March 27 for regulating and grading and repaving with asphalt on portions of Fulton St.; also for furnishing and delivering to Bureau of Highways, broken stone and screenings in this borough.

FORT MOTT, N. J.—Bids are asked until April 14 for constructing shell road here. Address Quartermaster.

ATLANTIC CITY, N. J.—Bids are asked by City Clerk until March 27, 8 p. m., for curbing Atlantic Ave. J. W. Hackney, Cy. Engr. (Advertised, Engineering News.)

ELIZABETH, N. J.—We are informed that T. F. CALLAHAN, East Grand St., Elizabeth, was lowest bidder, at $16,078, March 15 for paving Third Ave. with trap block. W. H. Luster, Jr., is Cy. Surv.

MAUCH CHUNK, PA.—I. M. Church writes us that his company expects to let a contract soon for Warren's bituminous macadam.

PHILADELPHIA, PA.—Director Costello, of Department Public Works, awarded contract for paving about twenty miles of city streets, entailing an expenditure of more than $1,000,000, to BARBER ASPHALT CO., the lowest bidder.

BALTIMORE, MD.—B. T. Fendall, Cy. Engr., informs us that bids will be received until March 29 for paving 8,500 sq. yds. with wood blocks.

GREENVILLE, MISS.—Specification on file in office of Engineering News, 220 Broadway, New York, for construction of granolithic sidewalks. (Advertised, Engineering News.)

NEW ORLEANS, LA.—Bids are asked by Chas. R. Kennedy, Comptroller, until March 27, 1 p. m., for repairing with square granite block, Poydras St. Plans and specifications on file at office of City Engineer.

VICKSBURG, MISS.—Bids are asked by J. D. Laughlin, Chancery Clk., of Warren County, until April 30 for repairing road No. 39.

ASHLAND, KY.—We are informed that contract for about 2¾ miles of brick paving has been let to JOHN BRADLEY, of Nashville Roofing & Paving Co., Nashville, Tenn., for $131,270. Bids were received March 6 by R. C. Richardson, Cy. Clk. Chas. D. Boggess, Cy. Engr.

LOUISVILLE, KY.—THE AMERICAN STANDARD ASPHALT CO. was the lowest bidder, at $1.86 a sq. yd., for construction of Fifth St., a distance of three squares.

ASHLAND, KY.—City Council awarded the contract for paving streets to JOHN BRADLEY, of Nashville, Tenn., for $131,270.

TOLEDO, O.—Board Public Service awarded to RUSSELL & JENNISON, March 7, the contract to pave Winthrop St., with wood block.

BOWLING GREEN, O.—Bids are asked by D. C. Harding, County Audr., until April 3 for grading, draining and macadamizing a number of highways of this county. E. L. Stafford, County Surveyor.

PORTSMOUTH, O.—Bids are soon to be invited for paving of Seventh, Washington, Bond, Lincoln, Sixth and Ninth Sts., aggregating about two miles of paving. Benj. Bratt is Cy. Engr.

GREENVILLE, O.—Bids are asked by A. T. Knoor, Vil. Clk., until March 31 for improving Pine St. by grading, curbing and graveling. C. O. Lucas, Cy. Engr.

FINDLAY, O.—The Council will probably pave Baldwin Ave. this spring. Elmer C. Bolton is Cy. Engr.

URICHVILLE, O.—We are informed that bids will soon be advertised for paving about 10,500 sq. yds. with brick. Est. cost, $18,000.

CINCINNATI, O.—Bids are asked by Eugene L. Lewis, County Audr., until April 21 for improving Section Ave., according to plans on file.

MARYSVILLE, O.—Council has passed an ordinance providing for a large amount of vitrified brick street paving. J. C. Kennedy is Vil. Engr.

DAYTON, O.—City Clerk will soon invite proposals for grading, gravelling and paving and setting combined cement curb and gutter on a large number of streets and alleys of this city. F. M. Turner is Cy. Engr.

ASHLAND, O.—Bids will soon be invited by M. H. Kagey, Cy. Clk., for paving of Cleveland Ave. with brick.

FINDLAY, O.—Bids are asked by Ely W. Pupple, Clk., Cass Twp., until April 3 for piking of township road with stone.

VERNON, IND.—Bids are asked by W. S. Campbell, County Audr., until April 3 for construction of one mile of pike road in Spencer Township.

PAOLI, IND.—Bids are asked by County Commissioners until April 5 for constructing roads in Stampers Creek Township. Alvin B. Ham, County Audr.

INDIANAPOLIS, IND.—Bids are asked by Board Public Works until March 29, 10 a. m., for constructing cement sidewalks in sundry streets. M. A. Downing, Chn.

LA FAYETTE, IND.—Bids are asked by Common Council until April 10 for the improvement of Schuyler Ave., 15th, 21st and 10th Sts. E. H. Andress, Jr., Cy. Clk.

KOKOMO, IND.—Bids will be received by County Commissioners for construction of a gravel road on county line, nine miles long.

INDIANAPOLIS, IND.—The contract to construct Fall Creek Boulevard has been awarded by Park Commissioners to the MOORE-MANSFIELD CONSTRUCTION CO., Stevenson Bldg., Indianapolis, for $67,950.

SULLIVAN, IND.—Bids are asked by County Commissioners until April 5 for construction of about 20 miles of road. E. E. Russell, County Audr.

RENSSELAER, IND.—We are informed that County Commissioners, James N. Leatherman, County Audr., have awarded contract for construction of macadam road, bids for which were received March 15, to H. H. STEWART & SON, Kokomo, Ind., for $14,641.

BEDFORD, IND.—Bids are asked by Walter G. Owens, County Audr., until April 3 for construction of six gravel or macadamized roads.

MARION, IND.—Bids are asked by John O. Wilson, Cy. Clk., until April 4 for the improvement of First St. with vitrified brick.

MICHIGAN CITY, IND.—Bids are asked by Ed. J. Heise, Cy. Clk., until April 3 for the improvement of Michigan, Eighth and Tenth Sts., by paving with brick.

SULLIVAN, IND.—Bids are asked by County Commissioners until April 15 for constructing over 20 miles of stone roads. R. L. Bailey, County Surveyor.

MARQUETTE, MICH.—Bids are asked by Franklin E. Bay, Cy. Controller, until March 28, 8 p. m., for grading Seventh St.

MENOMINEE, MICH.—Bids are asked by Fred. S. Norcross, Cy. Clk., until April 10 for paving a number of streets with macadam and Ogden St. with brick. Albert Hass, Cy. Engr.

MENOMINEE, MICH.—We are informed that about 10,000 sq. yds. brick paving will be done in the city at an estimated cost of $24,000. Albert Hass is Engr.

CHICAGO, ILL.—Bids are asked by Andrew M. Lynch, Pres. Bd. Local Imp., 216 City Hall, until March 28, at 10.15 a. m., for constructing cinder sidewalks.

RACINE, WIS.—The contract for paving Villa St. with brick was awarded to LA CROSSE STONE CO. at $1.45½ a sq. yd.

BOONE, IA.—City Council has ordered ten blocks of paving.

MANKATO, MINN.—We are informed that bids for about 30,000 sq. yds. brick paving will be advertised in about ten days. Est. cost, $61,000. J. R. Thompson, Cy. Engr.

FORT LEAVENWORTH, KAN.—We are informed that all bids received March 3 by Maj. D. E. McCarthy, Q. M., for grading were rejected.

HELENA, MONT.—The following bids were received by City Council for parking and grading Fifth Ave.: John Adami & Bro., $4,400; Louis Johnson, $4,136; A. Lind, $3,894. C. W. Helmick is Cy. Engr.

ST. LOUIS, MO.—THE PARKER-WASHINGTON CO., of West Virginia, was the lowest bidder for paving Green Lea Place, Virginia and Evans Aves., with asphalt, at $12,008, $6,569 and $18,551, respectively.

LITTLE ROCK, ARK.—Center St., is to be paved with vitrified brick, at a cost of $50,000.

SAN ANTONIO, TEX.—J. D. GARRETT was the lowest bidder, at $39,778, for broken stone pavements in District No. 3.

DALLAS, TEX.—B. F. Uhl has been engaged as engineer in charge of construction of roads in Dallas County, for which $500,000 of bonds have been issued. Mr. Uhl can be addressed care of County Commissioners.

OGDEN, UTAH.—A. F. Parker, Cy. Engr., writes us that bids are being received for building concrete curbs and gutters and sidewalks for the year 1905.

TORONTO, ONT.—We are informed that the paving of University Ave. with asphalt was petitioned against by ratepayers and will not be constructed.

ACTON, ONT.—Bids are asked by T. S. Moore, Vil. Clk., until April 1 for construction of macadam streets.

WINNIPEG, MAN.—According to C. J. Brown, Cy. Clk., the contract for supplying 1,000 to 1,500 tons of asphalt for paving has been awarded to UNITED STATES & VENEZUELA CO., 1 Broadway, New York, at $26.15 per ton. Bids were opened Feb. 21.

MANUFACTURING PLANTS.

The names of parties awarded contracts are printed in capital letters.

NEWPORT, N. H.—A contract has been awarded for building addition to mill of Dexter Richards & Sons Woolen Mills Co., which will cost $80,000.

NEWPORT, N. H.—A. S. Brown, Jr., Surety Bonds, 85 Water St., Boston, Mass., informs us that contract for constructing mill at this place for Dexter Richards Co., to cost $60,000, has been let to G. H. CUTTING & CO., Worcester, Mass. Edw. A. Buss, Boston, Mass., is Engr.

LEICESTER, MASS.—The Bottomly Mill of the Chapel Mills Mfg. Co., of Leicester, is to be modernized, and an addition 120 × 60 ft., 3 stories, of brick, will be built. A new power house will be constructed to contain two 125-HP. boilers and a 300-HP. engine.

DORCHESTER, MASS.—A. S. Brown, Jr., Surety Bonds, 85 Water St., Boston, Mass., informs us that contract for power plant at this place for Walter Baker Co. has been let to J. W. BISHOP CO., Worcester, Mass. Plant is to cost $70,000. Dean & Main, Boston, Mass., are Engrs.

CONNELLSVILLE, PA.—The plant of the Connellsville Machine Car Co. was destroyed by fire March 12. Loss, $75,000.

PHILADELPHIA, PA.—Ballinger & Perrot, Archs., 1200 Chestnut St., have plans for six-story addition to factory at Cherry and Sheridan Sts., for A. L. & W. A. Haines.

YORK, PA.—Hamme & Leber, Archs., 10 West Market St., have plans ready for bids for an addition to factory for York Carriage Co. Brick, four stories, 60 × 250 ft.

CHESTER, PA.—WM. PROVOST has been awarded contract for additions to American Dye Wood Co.'s plant; storehouse, 60 × 250 ft.; power house, 40 × 100 ft.; machine shop, 30 × 60 ft. New equipment will be installed.

PHILADELPHIA, PA.—GEO. C. DIETRICH, 939 North Seventh St., has been awarded contract for machine shop for Midvale Steel Co. Brick, one story, 50 × 550 ft.

CAMDEN, N. J.—Thos. Stephen, Arch., has invited bids for factory at Front and Federal Sts. for Wm. S. Scull & Co. Brick, five stories, 30 × 50 ft.

TRENTON, N. J.—A. Swan, Arch., is preparing plans for machine shop. Brick and steel, fireproof, three stories, 200 × 50 ft.

McADOO, PA.—The Pilsner Brewing Co. has been organized with a capital of $80,000. Jos. Laugran, Hazleton, Pa., is one of the incorporators.

COLONIAL BEACH, VA.—The Colonial Beach Electric Light & Power Co., will erect a steam laundry. W. S. P. Combs is Pres.

SISTERSVILLE, W. VA.—W. P. Ecker, Grafton, W. Va.; H. A. Ruhe, Grafton, and A. Bruner, of Sistersville, have organized a company to build a new brewery here, to cost $125,000.

CONCORD, N. C.—A 10,000-spindle cotton mill will be established here. The mill will be run by electricity. Chas. W. Johnson, of Charlotte, will be president.

NEW BERN, N. C.—The Pine Lumber Co. will at once rebuild its plant, burned at a loss of $6,000. Aberly & Hawk are the proprietors.

WALKERTOWN, N. C.—The Walkertown Milling Co., capital, $10,000, has been chartered here by T. A. Crews and associates, to erect a flour and grist mill.

CHERAW, S. C.—W. T. Thrower & Co. will establish a planing mill at Horry.

HAWKINSVILLE, GA.—The Planters' Oil & Fertilizer Co., recently organized with $25,000 cap. stock, will erect a two-story brick factory building.

ROME, GA.—The plant of the Davis Foundry & Machine Works, which was recently destroyed by fire, is to be rebuilt.

DALLAS, GA.—The Dallas Hosiery Mills will be enlarged and new machinery installed.

VIENNA, GA.—J. H. Stephens, of Crawfordsville, will establish bottling works here to manufacture soda water, ginger ale, etc.

BRUNSWICK, GA.—A movement has been started for the erection of a box factory at this place. E. F. Coney, L. R. Aikens, and others are the committee to make preliminary arrangements for organization of company.

BIRMINGHAM, ALA.—The foundry of Hardie-Tynes Foundry & Machine Co., burned recently at a loss of $18,000, will be rebuilt at once. The insurance amounted to $12,000. The machine shops were not damaged.

GADSDEN, ALA.—It is stated that the Alabama Consolidated Coal & Iron Co. will erect a new furnace here with a daily capacity of 275 tons, at a cost of $350,000.

BOLINGER, LA.—The saw mill owned by S. H. Bolinger & Co. was damaged by fire. Loss, $25,000. The plant will be rebuilt at once.

SHREVEPORT, LA.—The W. K. Henderson Iron Works & Supply Co., Ltd., want plans and bids for construction of a fireproof building for heavy mill supplies, building to be 60 × 150 ft., 4 stories.

KNOXVILLE, TENN.—The Louisville & Nashville Ry. Co. will build in the near future car shops in Burnside yards of this city, at a cost of $10,000. Plans are now being prepared. R. Montfort, of Louisville, Ky., is Ch. Engr.

NASHVILLE, TENN.—The Ford Flour Co. will erect a new flouring mill here.

JOHNSON CITY, TENN.—The Harmon-Hamlin Lumber Co. will erect saw mill at this place.

NASHVILLE, TENN.—The Hill Trunk Co. will double the capacity of its plant.

NASHVILLE, TENN.—The Liberty Mills Co. will rebuild its elevator, burned recently. It will be built of concrete, fireproof and have a capacity of $100,000 bushels.

COVINGTON, KY.—The Swege Foundry Co. will rebuild its plant, which was burned recently, at once.

LOUISVILLE, KY.—The Ryan-Hampton Tobacco Co., with branch factories at Bowling Green, Ky., and Martin, Tenn., will establish a factory here. W. B. Blakemore is Gen. Mgr.

INDIANAPOLIS, IND.—The Practical Cement Block Co. has incorporated with $20,000 cap. stock. The company is in the market for cement machines to make posts, railway ties and building blocks. A. E. Bradshaw is Pres.

ANDERSON, IND.—Grafton Johnson, of G[illegible]wood, will establish a canning factory in this city [illegible] ill invest $65,000 in building and equipment.

VINCENNES, IND.—The Central Foundr[illegible] will ask for bids for construction of an additional [illegible]ry building.

GRAND RAPIDS, MICH.—Work on new o[illegible] and foundry buildings of Aldine Grate & Mantel Co [illegible] be erected in Clyde Park Ave., will begin this month [illegible] site is 250 ft. square. The factory for wood and [illegible] working will be 50 × 125 ft., foundry, 50 × 100 ft.

PLAINWELL, MICH.—We are informed [illegible] Michigan Paper Co. is contemplating the erecti[illegible] equipment of a two machine mill here. Dan. J[illegible]tson, of Kalamazoo, Mich., is Arch. and Engr.

PEKIN, ILL.—H. H. Zimmer, Arch., is p[illegible]g plans and will take figures in July for a three-s[illegible] addition, 40 × 80 ft., to brewery for American Brew[illegible] Cost, $10,000.

ROCHESTER, MINN.—Richard Griesser, A[illegible] Chicago, Ill., is preparing plans for brewery for Schu[illegible] Bros., at Rochester.

OMAHA, NEB.—The municipal asphalt re[illegible] plant to be erected here will be erected by STA[illegible]ACHINE WORKS, of Indianapolis, Ind. Cost, $7,5[illegible] Work on construction will soon be started.

HELENA, MONT.—The Perry Soap Facto[illegible] recently burned, will be rebuilt on a larger scale an[illegible]perations will be resumed as soon as building can be [illegible]ted and machinery installed. C. T. Perry is proprietor.

KANSAS CITY, MO.—Cement works will be [illegible]ablished near here, to be operated by International Ce[illegible] Co.

DE WITT, ARK.—S. B. Shannon, of McKe[illegible] Tenn., will erect a stave factory here.

EL DORADO, ARK.—A canning factory will [illegible] erected here. The mayor can probably give informa[illegible].

BEAUMONT, TEX.—The Texas Rice Mills Co. will erect a new rice mill in this city, to cost about $[illegible]. W. O. Neyhaus is Pres.

WEST POINT, TEX.—J. C. Melcher, of O'Qu[illegible], Tex., has taken steps looking to the establishment of a modern brick and tile factory at this place.

DURANT, IND. T.—A mattress factory will be established here. A. Frank Ross can inform.

PALOUSE, WASH.—Dr. J. M. Risely and W. F. Smith, of Palouse, will erect a flour mill as soon as site can be secured.

PORT ANGELES, WASH.—W. A. and W. C. Geist have purchased interest of their late partner in Port Angeles Shingle & Lumber Co. and have reorganized under the name of Geist Lumber Co. They will rebuild mill which was recently partially destroyed by fire.

SEATTLE, WASH.—The Puget Sound Engine Works of this city will increase its plant in the near future. Plans provide for an 80-ft. extension to dock, extension to be covered with shed in which additional machinery will be placed.

BELLINGHAM, WASH.—The Koala Fuel Mfg. Co. will erect a plant in Bellingham for manufacture of coal briquettes at cost of not less than $40,000. J. Scobey and J. W. Hopp, of Olympia, are interested.

PORTLAND, ORE.—The Weyerhauser Timber Syndicate has bought site at St. Johns and will erect a plant which will cost more than $300,000, with capacity of 150,000 ft. in run of ten hours.

SAN FRANCISCO, CAL.—THE CONSTRUCTING ENGINEERING CO., of Tacoma, Wash., has been awarded contract for construction of a large milling plant to be erected near San Francisco.

The Standard Gas Engine Co., Market and Main Sts., San Francisco, is looking for an outside location for a factory. Jas. Hawkins is Secy.

OLDS, N. W. T.—The Olds Milling & Elevator Co. has been formed here for the purpose of erecting a flour mill and electric light plant, to cost $15,000.

HAMILTON, ONT.—The Otis-Fensom Elevator Co. will enlarge their present buildings in this city and in addition will erect a new foundry building and a new fireproof pattern vault.

RAINY RIVER, ONT.—It is stated that the Red Cliff Lumber Co., of Duluth, Minn., intend building a large saw mill and factory here.

WETASKAWIN, N. W. T.—August Gentz, of Wetaskawin, intends to build a distillery here.

MISCELLANEOUS CONTRACTS.

The names of parties awarded contracts are printed in capital letters.

DREDGING.—Toronto, Ont.—Contract for about 15,000 cu. yds. dredging in harbor and on range courses has been let to Frank Simpson, Toronto.

CREO-RESINATING LUMBER.—New York, N. Y.—Bids are asked by Geo. E. Best, Commissioner of Bridges, until April 6 for creo-resinating yellow pine lumber.

DREDGING.—Dry Tortugas, Fla.—Bids are asked by Bureau Yards and Docks, M. T. Endicott, Ch., Washington, D. C., until April 8 for dredging at Dry Tortugas. Specifications may be seen at office of Engineering News, 220 Broadway, New York.

PIER.—New York, N. Y.—Bids are asked by Maurice Featherson, Comr. Docks, Pier A, Battery Pl., until March 29 for building new pier on site of old pier No. 22, East River.

BREAKWATER EXTENSION.—Richibucto, N. B.—Bids are asked by Department of Public Works, Ottawa, Ont., until April 3 for construction of breakwater extension at this place.

DAM.—Pittsburg, Pa.—Bids are asked until April 17 for building Dam No. 2 at Six Mile Island, Allegheny River. Major Wm. L. Sibert, U. S. Engr. (Advertised, Engineering News.)

SPRINKLING WAGONS.—Winnipeg, Man.—Bids are asked until 8.30 p. m., March 28, for construction and delivery of six sprinkling wagons. H. N. Ruttan, Cy. Engr.; C. J. Brown, Cy. Clk.

PIER EXTENSION.—New York, N. Y.—Bids are asked by Maurice Featherson, Comr. Dock, Pier A, Battery Pl., until 3 p. m., March 27, for building lateral extension to pier No. 32, East River.

LUMBER.—Washington, D. C.—Bids are asked by Isthmian Canal Commission, Major H. J. Gallagher, U. S. A., Purchasing Agent, until April 10 for furnishing yellow pine or Douglas fir lumber.

DAM.—San Franciscoo, Cal.—Bids are asked until April 19 for building a portion of dam known as Barrier No. 1, Yuba River, Cal. Capt. Wm. W. Harts, U. S. Engrs. (Advertised, Engineering News.)

QUAY WALL.—Bremerton, Wash.—Bids are asked by Bureau Yards and Docks, M. T. Endicott, Ch., Washington, D. C., until May 6 for constructing concrete quay wall at navy yard, Puget Sound, Bremerton, Wash.

ROAD ROLLERS, SCARIFIERS.—New York, N. Y.—Bids are asked by Department of Parks, John J. Pallas, Pres., Arsenal Bldg., until March 30 for furnishing and delivering three steam road rollers and two road scarifiers.

CEMENT.—Winnipeg, Man.—Bids are asked by Chairman Committee on Works until April 4 for supply of 20,-000-30,000 bbls. of cement. C. J. Brown, Cy. Clk. (Advertised, Engineering News.) Mentioned in our issue of March 16.

MINING EQUIPMENT.—Maiden, Mont. — We are informed that Globe-Maginnis Mining Co., E. H. Crabtree, Mgr., will require five 50-ton leeching tanks (cyanide) and all necessary tanks, apparatus, etc., for 50-ton cyanide plant. Machinery for 10-stamp mill will also be needed.

MINING EQUIPMENT.—Cherry Creek, Nev.—We are informed that Wide West Mining Co., J. H. Leishman, Supt. and Mgr., will purchase about Aug. 1, five stamps of 800 lbs., 5½-ins. cam shafts for ten stamps with cams, ore feeder for five cams, concentrator table, 50-HP. boiler and 30-HP. engine.

DAM.—Phoenix, Ariz.—Secretary of Interior has awarded contract for construction of Roosevelt Dam, Salt River irrigation project, Arizona, to JOHN M. O'ROURKE & CO., Galveston, Tex., for $1,147,600. Bids for the work were received Feb. 23, and are given under Contract Prices in our issue of March 9.

SAWS, PLANERS, SCRAPERS, ETC.—Washington, D. C.—Bids are asked by Isthmian Canal Commission, Major H. C. Gallagher, U. S. A., Purchasing Agent, until April 19, for furnishing miscellaneous supplies, among which are saws, parts for French cars, planers, fire hose, leather belting, wagons, scrapers, etc.

CABLE, TIES, REAMERS.—Washington, D. C.—Bids are asked by Bureau Supplies and Accounts, Navy Department, until April 4, for furnishing naval supplies, among which are copper cable, cypress ties, cast iron specials, gate valves, Prentiss swivel vises, reamers, wire rope, copper tubing, etc. H. T. B. Harris, Paym.-Gen., U. S. N.

DITCH WORK.—Kenton, O.—J. W. Gilmore, County Surveyor, will sell on April 8, at his office in Kenton, the contract for construction of Bodell Ditch improvement. The work consists of deepening and widening channel of Hog Creek, requiring about 7½ miles of earth work and 3½ miles of rockwork excavation. Entire cost of improvement is estimated at $37,555.

SPRINKLING WAGONS.—Washington, D. C.—Bids are asked by Isthmian Canal Commission, Major H. J. Gallagher, U. S. A., Purchasing Agent, until 10.30 a. m., March 25 for furnishing and delivering at Pier No. 57, North River, New York City, two sprinkling carts (two horse), 300 gallons capacity, standard make, Studebaker or equal, and one set of spare parts.

MAIL CONVEYORS.—Chicago, Ill.—Following bids were received March 15 by Supervising Architect, Washington, D. C., for auxiliary mail conveyors and other apparatus in U. S. Postoffice, Chicago, Ill.: Lamson Consolidated Store Service Co., Boston, Mass., $23,841; alternate, $26,-980; time, 160 working days. Universal Pneumatic Transmission Co., Chicago, Ill., $12,993; time not stated. Dodge Coal Storage Co., Philadelphia, Pa., alternate C, $29,-944; time not stated.

MINING EQUIPMENT.—Hill City, S. Dak.—We are informed that Gopher Gold Mining Co. has boilers, engines, crusher, five-stamp mill, old hoist and a three-drill Leyner compressor. The hoist and compressor have been a fire and will probably have to be replaced. The company will also need additional stamps and equipment. A. H. Elftman, Consult. Engr., 706 Globe Bldg., Minneapolis, Minn., and A. H. Arundel, Supt., will be at Hill City from March 15 to March 30 to complete plans and receive bids on whatever machinery is needed. Plans and bids will be submitted to the Board of Directors at Minneapolis early in April for final action.

FOUNDATIONS, ETC.—Pittsburg, Pa.—Bids are asked until April 17 for building 100 ft. of Chanoine Dam, two bear trap dam foundations, each 93 ft. long, a Chanoine weir 160 ft. long, three piers and abutments. Dam No. 3, Ohio River, at Glenosborne, Pa. Bids are also asked until April 18 for building 303 ft. of Chanoine dam, two bear trap dam foundations, each 93 ft. long, a Chanoine weir 96 ft. long, three piers and abutment, Dam No. 5, Ohio River, near Freedom, Pa. Bids will likewise be received until April 19 for building 98 ft. of Chanoine dam, two bear trap dam foundations, each 93 ft. long, a Chanoine weir, 169 ft. long, three piers and abutment, Dam No. 4, Ohio River. Major Wm. L. Sibert, U. S. Engrs. (Advertised, Engineering News.)

HYDRAULIC DREDGE AND PIPE LINE.—St. Louis, Mo.—Following bids were received March 17 by Mississippi River Commission, Wm. B. Ladue, Secy., for construction of hydraulic dredge and pontoon pipe line (1) being bid for dredge and pipe line, (2) bid for dredge only, and (3) bid for pipe line only: Mississippi Valley Construction Co., Fullerton Bldg., St. Louis, Mo., (1) $243,000, (2) $221,000, (3) $25,000; Great Lakes Engineering Co., Detroit, Mich., (1) $274,000, (2) $250,600, (3) $31,800; Harlan & Hollingsworth Co., Wilmington, Del., (2) $190,000; Maryland Steel Co., Sparrows Point, Md., (2) $200,000; James Reilly Repair & Supply Co., New York, N. Y., (3) $42,547; Henry Vogt Machine Co., Louisville, Ky., (3) $18,488; Springfield Boiler & Mfg. Co., (1) $238,-908, (2) $220,458, (3) $22,361; Ellicott Machine Co., Bush and Severn Sts., Baltimore, Md., (3) $28,850.

DAM.—Los Angeles, Cal.—Following bids were received March 15 by U. S. Reclamation Service, Los Angeles, J. B. Lippencott, Supervising Engr., for construction of Laguna Dam and Sluiceways: Chicago Engineering & Construction Co., Chicago, Ill., $1,356,413, $1,295,413; P. McDonald, Duluth, Minn., $882,612; Andrew Holloway, Pasadena, Cal., $1,294,150; Keltie Contracting Co., Joliet, Ill., $1,933,200; City Street Improvement Co., 512 Mills Bldg., San Francisco, Cal., $882,750; J. G. White & Co., New York, $1,169,255; Orman & Crook, Pueblo, Colo., $835,600; Faris Kesl Construction Co., Boise, Idaho, $924,150; Bentley, Tuttle, Pelton Co., San Francisco, Cal., $971,670; Mosier De Graff Construction Co., Buffalo, N. Y., $927,852; Black & Laird, Birmingham, Ala., $1,229,392; N. S. Sherman, Oklahoma, $1,569,357; Griffith & McDermott, Chicago, Ill., $935,069. Itemized bids will be given under Contract Prices.

REMOVING STONE.—New York, N. Y.—We have received the following information concerning the contract for removing stone at Pensacola, bids for which are now being asked, the advertisement appearing in Engineering News, as was noted in our issue of March 9: "There are about 80,000 or 90,000 cu. yds. of rock which was brought to Pensacola, Fla., in ballast by sailing vessels several years ago, and thrown in shallow water in one of the little coves of the bay. The rock covers a space of about 350 sq. ft. and the top of the rock is visible at low tide. The water there is about 14 ft. deep. The largest of these rocks would weigh from 100 to 125 lbs.; the majority of them would weigh, perhaps, in the neighborhood of 50 lbs. There is, now, occasion to use the rock. Lighters, scows and steam tug would be furnished, also men to handle the rock. What is wanted is only the hoisting apparatus and the men to work it." For further information apply to P. O. Dumont, 16 William St., New York.

IRRIGATION.—Washington.—We are informed that certain parties in Seattle propose to take a body of water out of the Columbia River in sufficient quantity to irrigate 8,000 acres of land by gravitation and to furnish power to operate a plant large enough to generate electrical power to manufacture lumber and flour, also power for electric roads and pumping plants for the irrigation of three tracts of fine agricultural lands. The first one contains 75,000 acres; second, 160,000 acres; third, 180,000 acres. They have a fall of 78 ft. from head of rapids to foot of same, a distance of 11 miles. The ditch is to be 20 ft. wide at the bottom and 40 ft. at the top, and there will be a cut of three miles from the head of the rapids to bring the water out on level ground. The ditch at deepest place will be 30 ft. The excavators will find boulders, gravel, sand-rock, and volcanic ash. In building this water-way, the lateral ditches and reservoir on the 75,000 acres will be built at the same time work is being done on power ditch. The engineer's estimated cost of this project is about $687,000. Information is wanted by M. D. Kelly, P. O. Box 384, (109 Marion Ave.) Seattle, in regard to the best and latest improved machinery for this kind of work. From other sources we learn that a plan is under way to irrigate a claim of 320 acres of desert land, located on a river. And from a third correspondent, who is located in Spokane, Wash., and wishes his name kept private, writes us as follows: "I am interested in reclaiming, from annual overflow, a lot of land out in this country. It will be necessary to widen the river banks in a number of places, and perhaps deepen the river in other places. The work may cost as much as $1,-500,000. The engineering situation needs to be personally examined and the cost estimated by the very best expert procurable in the U. S. to command the attention and respect of investors."

READERS' WANTS

If any one is in the market for any engineering or contracting supplies, the first thing to do is to refer to our advertising pages, but if the buyer cannot find what he wants we particularly ask that he notify us at once and we will inform the proper parties without cost to the inquirer. A copy of **ENGINEERING NEWS BUYERS' GUIDE** will be mailed to any one upon application. This paper will always appreciate any news notes regarding public, or important private work, and will be pleased to receive detailed items. Requests to hold names will be complied with in every case. **Do not fail to write our advertisers or us.**

DRY KILN.—Charleston, S. C.—The Leaphart Lumber Co. is reported in the market.

COMPASS.—St. Cloud, Minn.—A. E. Morgan, C. E., writes us that he wants to buy a compass.

ACETYLENE GAS GENERATORS.—Tryon, N. C.—The Cobb Co. is reported in the market for the above.

BOILERS.—Louisa, Ky.—A. Snyder, Pres. Louisa Canning Co., is in the market, and also is the State Hospital, at Morganton, N. C.

SAFE, VAULTS, FURNITURE, ETC.—Roanoke, Va.—The American Savings Bank, G. H. P. Cole, is in the market for the above.

TOOLS, HARDWARE, ETC.—Malta.—U. S. Consul Grout, of Valetta, reports that catalogues are wanted at once relating to the above.

ENGINES, CARS, ETC.—Watertown, S. Dak.—A. Q. Rome, Secy. Watertown Transportation Co., writes us that the above are wanted at once.

RUBBER BOOTS, CORDAGE, ETC.—Turkey.—G. & R. Nacamulli, of Pinta Han 17, Stamboul, Constantinople, wants names of makers of the above.

LIQUID FUEL BURNERS.—Philadelphia, Pa.—W. S. Haines Co., 136 South 4th St., writes us that they want the names of manufacturers of petroleum burners.

TRAVELING DERRICK.—Williamsport, Pa.—Busch & Stewart, contractors, Trust Bldg., write us that they wish to get a traveling derrick for sewer work, etc.

CONDUITS (5,000 ft.), FLUSH TANKS AND PAVING BRICK (26,000 sq. yds.).—Sheboygan, Wis.—C. U. Bolly, Cy. Engr., writes us that he is in the market for the above.

CALCINED MAGNESIA AND QUARTZ (30 MESH).—Syracuse, N. Y.—The Technical Investigation & Construction Co., 712 Dillaye Bldg., writes us that samples from firms handling the above are wanted.

SMALL WATER MOTORS.—San Francisco, Cal.—Wm. B. Newhall, 200 Fremont St., writes us that he wants the names of manufacturers of small water motors of 10 or 15 HP. Catalogues, etc., are wanted.

CHECKERED STEEL FLOOR PLATE.—Brooklyn, N. Y.—The Empire Construction & Supply Co., 75 Guernsey St., Brooklyn, and 136 Liberty St., N. Y., writes us that it wants the names of firms making the above.

SHOP MATERIAL, CRANES, ETC.—Newark, N. J.—We are informed that the Hay Fdy. & Iron Works, of Newark, are about to erect new shops and will be in the market for equipment, cranes, trestle, coal pockets, etc.

RUBBER BELT CONVEYORS.—Berlin, Germany.—The Aktiengesellschaft für Feld-und Kleinbahnen-Bedarf vormals Orenstein & Koppel, Tempelhofer-Ufer 24, Berlin S. W. 61, writes us that they are in the market for the above.

CONTRACTORS' TOOLS, CONCRETE SUPPLIES, ETC.—Rock Island, Ill.—The Concrete Construction Co., 1825½ Second Ave., writes us that it is in the market for the above, and all kinds of material connected with contractors' work.

CONDENSING PLANT.—Richmond, Va.—The Sydnor Pump & Well Co., 1326 East Main St., writes us that it wants a simple inexpensive condensing plant to condense a sufficient supply of salt water for use in a 100-HP. boiler on the coast.

BENT IRON WORK.—Victor, N. Y.—The Locke Insulator Mfg. Co., writes us that it wants to correspond with concerns making bent iron work and similar material. The pieces this company wants made are of heavy sheet material stamped into shape.

CEMENT, FILTERS, WATER PIPE, STAND-PIPE AND VALVES.—Montrose, Colo.—The City Clerk writes us that the above material is wanted. This city is now asking for bids for considerable public work, as stated in our advertising columns last week.

MACHINE TO GRIND CORK.—Mexico.—Maldonado & Co., 16 Beaver St., N. Y., writes us that a customer with a cork factory in Mexico wants a new machine for grinding cork, and also a machine for parting small pieces of cork or cardboard for use in packing bottles.

ROPE TRANSMISSION, ETC.—Charlotte, N. C.—The Catawba Power Co., W. S. Lee, Jr., Ch. Engr., writes us that it is in the market for rope transmission plant, as it has two 900 KW. generators, which are to be driven by rope from water wheel shaft, situated 22 ft. below generator shaft.

AERIAL WIRE TRAMWAY.—Calaveras county, Cal.—E. K. Stevenot, M. E., 1429 Mason St., San Francisco, Cal., writes us that the owner of the Baltimore & N. Y. group of gold quartz mines have asked him for estimates for an aerial wire tramway, about half a mile long to deliver ore from the mine to the mill.

TOOLS FOR STREET CONSTRUCTION AND MAINTENANCE, TOOL CARTS, STREET CASTINGS, CATCH-BASIN COVERS, INLETS, GUTTER CROSSINGS, CURB, STREET CULVERTS, CROSSWALK, FLAG, PAVING BLOCKS.—South Orange, N. J.—John B. Duncklee, C. E., 35 Fairview Ave., writes us that he wishes to receive catalogues from firms making the above-mentioned supplies.

STEEL WINDOW FRAMES, BUILDING SUPPLIES, ETC.—Chattanooga, Tenn.—The Eureka Supply Co., Chamberlain Bldg., is in the market for the above and general building supplies, as are also Carter & Pringle, Archs., Loan and Exchange Bank Bldg., Columbia, S. C.; Willard Brick Co., of Chattanooga, Tenn.; Geo. A. Mebane, of Spray, N. C.; W. E. Brown, Augusta, Kan.; the Bells Real Estate & Investment Co., Bells, Tenn.; the English Drug Co., of Monroe, N. C., etc.

MINING MACHINERY.—Cherry Creek, Nev.—J. H. Leishman, Supt. and Mgr., Wide West Mining Co., writes us that the following material will soon be wanted at once: One Challenge ore-feeder, complete, with wood frame and hopper and all necessary track iron; on single discharge mortar, "Geiser" pattern; one screen frame, with two gib and two bottom keys; one set of upper and lower oak gutters, fitted to stems; five stamp shoes, 8½-in. dia. × 8 ins. high-projectile steel; five stamp dies, 8½-in. dia. × 8 ins. high-projectile steel; five stamp heads, 8½-in. dia. × 17 ins. of tough cast-iron; five stems, 3¼-in. dia. × 15 ft. long—mild steel; five Tappets, cast-steel, 9¼-in. dia. × 11 ins., steel gibs and keys, fitted to stems and counterbored opposite gibs; ten double-armed cast-steel cams, 29 ins. over all, 5½-in. bore, lifting faces, 2½-in. key-seated and fitted to cam-shaft with "Barbour" patent keys; one steel cam-shaft, of length to carry ten stamps and pulley, with steel collars, 5½ ins. diameter; three cam-shaft boxes, 12½ ins. long, with caps; five sockets and fingers, with shaft and boxes to hold same; one pair double sleeve flanges, for wood pulley 72 ins. dia., the present pulley being 11 ins. face, and which will be built up to 14 ins.—hub to be 5½-in. bore and key-seated; Necessary bolt and washers for additional battery frame, such addition being one battery post and ties, the approximate width of the ten-stamp battery being 12 ft. 8 ins. Copper plates—one low chock, one back plate, 8-in. × 4 ft., one apron plate 4 ft. 6 ins. × 12 ft.—weighing 5 lbs. to sq. ft., plated with 1 oz. of silver to sq. ft. One 6-ft. concentrator, complete. One tightener for battery belt. 35-HP. center crank engine; 50-HP. return tubular boiler.

FOREIGN CONTRACTS—EXPORT NEWS.

The names of parties awarded contracts are printed in capital letters.

STEEL MANUFACTURE.—New South Wales.—Tenders are asked by Charles A. Lee, Minister for Public Works, Sydney, New South Wales, until Sept. 1 for the manufacture, supply and delivery in New South Wales of all steel and iron required by the government for a period of seven years. Contract and specifications and statistical information concerning state of New South Wales may be seen at office of Engineering News, 220 Broadway, New York. The official advertisement for the above work will appear in the March 30th issue of Engineering News.

RAILWAY.—Argentina.—A correspondent writes us that the construction of the railway through the center of the Province of Buenos Aires, recently financed in London by Edward Casey, now seems a certainty. The original concession for this road was granted to John D. Cilley in 1897, but owing to certain objectionable clauses in it he was unable to finance the scheme, and it was practically abandoned. A few years later Enrique Lavelle & Co., of Buenos Aires, obtained the concession; certain amendments were made in it and Mr. Casey, early this year, succeeded in securing the capital for the construction of the railway, viz., $10,000,000 in shares and $5,000,000 in debentures, bearing 5% interest, to be issued at 92% of their face value. The company will bear the name of the "Buenos Aires Central Railway." The line will be 520 kilometers long and will start from the Central Produce Market at South Barracas, Buenos Aires, running in the direction of Marcos Paz and thence to 9 of July, from which point it will run to Carhue, between the Western and Southern railways. The legal representative of the company in Buenos Aires will be F. J. Wythes. Offices have been taken at the corner of Calles Cangallo and 25 de Mayo. John D. Cilley is preparing the plans for the railway and they will be ready in three months. The construction of the works will be begun immediately after the approval of the plans, and it is calculated that it will be carried on at the rate of two kilometers per day. There will be 45 stations on the railway. Tho contractors will be CILLEY & CO. and J. G. WHITE & CO., of London. An application has been made by the concessionaires to the Provincial Government for the right to construct extensions and branches of the railway of an aggregate length of about 600 kilometers. It is quite probable that this latter application will be granted.

INDUSTRIAL NOTES.

OUR READERS are requested to send short notes regarding new contracts that they are about to award, or have secured, for our news columns. Changes in firms' names and addresses are also wanted. "Write-ups" will not be inserted under any circumstances, as notes must contain news of interest to our readers. If our readers are in the market for any kind of machinery, tools, etc., we shall be glad to send them names of responsible firms making what they want.

THE LOCOMOTIVE APPLIANCE CO., St. Louis, Mo., states that after March 9 its address will be the Old Colony Building, Chicago. Ira C. Hubbel, Pres.; Willis C. Squire, First Vice-Pres.; W. H. England, Secy.

THE EXETER MACHINE WORKS, Havemeyer Bldg., N. Y., reports that it has secured the contract from S. Pearson & Son, contractors, for the P., N. Y. & L. I. Tunnel for the electric haulage engines, the contract calling for eight complete machines.

THE FRIESTEDT INTERLOCKING CHANNEL BAR CO., Tribune Building, Chicago, has been incorporated for $1,000,000. The business of this company has become so extensive that a larger organization and better facilities for handling it require the incorporation.

THE PENN BRIDGE CO., Beaver Falls, Pa., has since the destruction of its plant by fire, made arrangements to lease a bridge plant at Carnegie, Pa., and it is therefore in position to complete contracts which it had on hand, and also to undertake any new contracts without delay. Plans for rebuilding have not been fully matured.

CHARLES WARNER CO., Wilmington, Del., reports that it has just closed contracts in Philadelphia for the delivery of over 5,000,000 of the new diamond stone brick made on the sand-lime principle in Wilmington. The capacity of the plant for making this kind of brick is 18,000,000 annually. The Diamond Stone Brick Co. has developed a large variety of special colors.

W. W. PATTERSON CO., Pittsburg, Pa., reports that within two weeks they have received orders of blocks to repair for the following firms: Ritter-Conley Mfg. Co.; Fort Pitt Bridge Works, and the McClintic-Marshall Construction Co., all of Pittsburg, and a large order of new blocks from Penn Bridge Co., of Beaver Falls. We now have enough work to keep us rushed for the next two months.

THE LEAD-LINED IRON PIPE CO., Wakefield, Mass., has secured orders through its New York office, 221 West 120th St., from Huston & Corbett, who have the contract for extensive improvements to the plumbing at the Immigration Depot, Ellis Island, N. Y. H., from Jos. Bauer, 388 Wallabout St., Brooklyn, who is overhauling the plumbing, heating etc., in the Woman's Prison in the Tombs, and from Christopher Nally, who is doing an extensive piece of plumbing work at the N. Y. Aquarium.

THE ALLIS-CHALMERS CO., Milwaukee, Wis., reports that it has secured contracts from the Mansfield (O.) Ry., Light & Power Co. for a 250-KW. and two 530-KW. Bullock generators, one 500-KW. and a 600-KW. railway generator and a 125-HP. motor, etc.; from Chapin & Gore, of Chicago, for three Reliance engines and three generators for use in the Majestic Theater; from the C. & N. W. Ry. for two Reliance, 32 × 36, belted engines and two 250-KW. direct-current Bullock generators; from the W. & L. E. R. R. two engine-type 250-volt generators, 16 motors, etc., for the repair shops at Canton, O.; from the Detroit United Ry., for a heavy duty cross-compound Reynolds-Corliss engine, etc.

THE A. S. CAMERON STEAM PUMP WORKS, foot of East 23d St., New York, have entered another order from the Girls' Industrial Home of Ohio for the delivery of a regular horizontal piston pump, having the water ends made entirely of acid metal. This pump is for delivery at the Institution located at Hyatts, O., where it is required for station duty in pumping sulphur water to the surrounding cottages. The transfer of the Cameron Works' agency at Birmingham, Ala., to the Crane Co. was made on account of the sale of the Milner & Kettig Co.'s stock to their successors, the Crane Co. W. H. Kettig, formerly Pres. Milner & Kettig Co., is local manager for the Crane Co. Through their agents, The Milner Supply Co., of Huntington, W. Va., the Cameron Works are in receipt of an order for a 5 × 12 power driven pump, to be used for the water supply of the Crescent Glass Co., of Weston, W. Va. The pump is composition fitted and will have a capacity of 150,000 gallons per day at ordinary speed.

THE WESTINGHOUSE ELECTRIC & MFG. CO., Pittsburg, is building for the Peoples' Power Co., of Moline, Ill., two engine type generators to be installed in their power station. The addition to the present equipment will be a 1,100 KW., 2-phase alternator of the revolving field type, operating at 2,400 and 4,800 volts, and a 600-KW. 600-volt, direct-current machine.

An order for three 300-KW. alternating-current generators has also been placed with the Westinghouse Co. by the Barber Lumber Co., of Boise. These machines will generate current at 440 volts which will be transformed to 23,000 volts for transmission. The necessary transformers, switchboards and lighting arresters are included in the apparatus to be furnished. The Mammoth Copper Mining Co. of Salt Lake, has placed an order with the Westinghouse Co. for a large addition to their electrical equipment. A total of nearly 800 HP. in induction motors of different sizes, together with a motor-generator set, transformers, switchboard and three mining locomotives, is included in the order. The motors, two of which have a rated capacity of 200 HP. each, and five of 50 HP. each, will operate on three-phase, 2,000-volt circuits.

THE PELTON WATER-WHEEL CO., of San Francisco and New York, report quite a number of sales to power companies operating steam plants, who desire to supplement their present equipment with Pelton wheels, direct connected to generators. Several recent sales referred to are:

A 700-HP. Pelton wheel for the hydraulic plant of The Grande Rond Electric Co., of Oregon, who will close down the steam and water turbine plant, immediately upon the completion of the new hydraulic station. The pressure under which the new wheel will operate is 877 ft. A 450-HP. Pelton wheel for The Nanaimo Electric Light & Heating Co., of B. C. This water wheel belts to a line shaft now driven by steam engine; the latter will be used to help out the Pelton wheel at periods of low water and peak load. The Silver Lake Mines of Colorado have ordered a 600-HP. Pelton wheel to be direct coupled to a 400-HP. Allis engine. The two prime movers will drive generators in the large power plant of this mining company. A 450-HP. Pelton wheel unit is also under course of construction for the Territorial Government of Hawaii, besides a 900-HP. unit for La Grande Water Storage Co., of Oregon. Pelton combination needle and deflecting nozzles are used, the deflecting being handled by Sturgess and Lombard governors.

CONTRACT PRICES.

(See also pages 112 and 114.)

*FILTRATION PLANT.—Pittsburg, Pa.—Bids were received March 8 by Board Public Works, Bureau of Filtration, Morris Knowles, Ch. Engr., for construction of a filtration plant. Bids were received on ten contracts and the contract for all of these was awar[illegible] to T. A. GILLESPIE CO., 71 Broadway, New York [illegible] West-inghouse Bldg., Pittsburg. The bids received [illegible] Contract No. 1, which calls for construction of filter[illegible] and appurtenances, were as follows; (1) Engineer[illegible] estimate; (2) T. A. Gillespie Co., New York and P[illegible]; (3) Daniel J. McNichol & Co., Philadelphia; [illegible] Booth & Flinn, Ltd., Pittsburg; itemized bids on re[illegible] nine contracts are given elsewhere in this issue:

Bids Received at Pittsburg, Pa., March 8, for Filtration Plant. Contract No. 1.

	Quantity.	(1)	(2)	(3)	
General excavation	600,000 cu. yds.	$0.27	$0.27	$0.40	[illegible]
Excavation in trench	72,000 " "	0.58	0.65	0.75	[illegible]
Disposal of surplus material	8,000 " "	0.20	0.15	0.20	[illegible]
Embankment, Class A	136,000 " "	0.15	0.13	0.25	[illegible]
" " B	180,000 " "	0.12	0.13	0.20	[illegible]
Filling over vaulting	245,000 " "	0.20	0.10	0.25	[illegible]
Puddle, Class A, on premises	48,000 " "	1.25	0.95	1.93	[illegible]
Puddle, Class B, off premises	2,000 " "	2.00	2.10	3.20	[illegible]
Broken stone for lining	11,000 " "	0.90	1.25	2.00	[illegible]
Broken stone or gravel for filling	2,500 " "	1.00	0.70	0.60	[illegible]
Slope paving	16,000 sq. "	3.25	2.30	2.50	[illegible]
Concrete:					
In floors, in general, Class A	75,000 cu "	6.25	5.25	5.85	[illegible]
" " two lays, Class A1	3,000 " "	6.50	5.25	6.85	[illegible]
" " pipe galleries, Class B	10,000 " "	6.50	5.25	5.85	[illegible]
" walls, Class C	17,000 " "	6.25	5.25	7.67	[illegible]
" piers, Class D	10,000 " "	8.00	6.75	8.00	[illegible]
" vaulting, Class E	55,000 " "	6.25	5.25	5.25	[illegible]
Arch centering	2,135,000 sq. ft.	0.08	0.07	0.07	[illegible]
Concrete:					
In gate chambers, Class F	2,500 cu. yds.	6.50	8.50	8.77	[illegible]
In condu. & drains, not reinf., Class G	1,200 " "	6.50	8.50	12.00	[illegible]
In conduits and drains, reinf., Class H.	7,800 " "	10.00	8.50	13.00	[illegible]
Misc. reinf. concrete, Class I	4,000 " "	9.00	8.50	11.00	[illegible]
Concrete in trench, Class J	2,400 " "	5.50	4.50	5.00	[illegible]
Change in ratio of cement	1,000 " "	0.50	0.35	0.64	[illegible]
Steel reinf. condu'ts & drains, Class A	800,000 lbs.	0.04½	0.02¼	0.04	[illegible]
Misc. steel reinforcements, Class B	420,000 "	0.04	0.02¼	0.04	[illegible]
Brick masonry	300 cu. yds.	15.00	11.00	12.00	10.00
Waterproofing, Class A	16,000 sq. "	0.25	0.60	0.60	[illegible]
Waterproofing, Class B	1,500 " "	0.50	0.90	0.70	0.75
Tile drains in piers, walls and vaulting.	46 filters	250.00	60.00	100.00	[illegible]
Iron pipe drains in piers of galleries	490 piers	1.25	2.00	2.30	1.50
96-in. steel pipe, ½-in. plate	1,550 lin. ft.	25.00	21.00	19.00	19.00
60-in. " " ⅜-in. "	820 " "	10.75	12.00	10.50	[illegible]
57-in. " " ⅜-in. "	1,350 " "	10.25	11.50	9.95	9.25
54-in. " " ⅜-in. "	1,330 " "	9.75	11.00	9.60	9.00
48-in. " " 5/16-in. "	1,700 " "	7.25	9.00	7.81	7.25
42-in. " " 5/16-in. "	1,300 " "	6.25	8.00	7.04	6.50
36-in. " " 5/16-in. "	160 " "	5.75	8.00	6.49	5.80
30-in. " " ⅜-in. "	370 " "	6.00	8.00	6.66	6.00
30-in. " " ¼-in. "	1,450 " "	4.00	7.00	5.17	4.90
24-in. " " ¼-in. "	150 " "	3.60	6.00	4.62	5.50
Cast-steel specials	43,000 lbs.	0.05	0.12	0.10	0.11
Cast-iron pipe (general work)	525 tons.	40.00	43.00	35.20	53.00
Cast-iron hub & spigot specials (gen. w.)	240 "	75.00	92.00	73.70	85.00
Cast-iron flanged specials (gen. work)	335 "	90.00	115.00	93.50	85.00
Cast-iron pipe (high pressure)	325 "	35.00	45.00	35.20	40.00
Cast-iron hub & spigot specials (high p.)	10 "	70.00	95.00	72.60	90.00
8-ft. 4-in. × 6-ft. hand op. sluice gates	1 gate	2,100.00	1,800.00	2,090.00	1,900.00
6-ft. 8-in. × 6-ft. " " " "	1 "	1,800.00	1,800.00	1,843.00	1,600.00
6-ft. × 9-ft. motor op. sluice gates	3 "	2,400.00	2,100.00	2,310.00	1,800.00
6-ft. × 9-ft. hand " " "	2 "	1,800.00	1,700.00	1,760.00	1,400.00
6-ft. × 7-ft motor " " "	3 "	1,850.00	2,000.00	2,063.00	1,700.00
5-ft. × 6-ft. " " "	1 "	1,700.00	1,900.00	1,705.00	1,500.00
60-in. circ. hand " " "	4 "	800.00	1,000.00	990.00	1,050.00
30-in. " " " " "	1 "	250.00	420.00	319.00	400.00
24-in. " " " " "	6 "	150.00	300.00	215.00	275.00
5-ft. 3-in. × 7-ft. hyd. op. sluice doors	46 doors.	1,600.00	1,200.00	1,117.00	1,200.00
Steel drainage gates	lump sum.	500.00	200.00	250.00	275.00
Steel hinged gates	56 sets.	40.00	58.00	57.20	60.00
Yellow pine lumber, stop planks, etc.	10 M. ft. B. M.	50.00	160.00	95.00	75.00
36-in. stop valves	8 valves.	450.00	380.00	286.00	400.00
30-in. " "	1 "	350.00	300.00	231.00	330.00
20-in. " " no gears	93 "	100.00	110.00	88.00	110.00
20-in. " " geared	138 "	115.00	110.00	94.60	130.00
16-in. angle stop valves	46 "	75.00	85.00	62.70	85.00
10-in. stop valves	4 "	35.00	35.00	30.80	32.00
8-in. " "	51 "	22.00	26.00	24.20	24.00
6-in. " "	31 "	15.00	17.00	15.95	16.00
4-in. " "	7 "	10.00	11.00	19.80	11.25
3-in. " " and nipples	24 "	8.00	7.00	7.92	7.00
3-in. brass valves	2,070 "	5.00	5.00	6.05	6.60
Indicator stands, wheels, etc.	284 stands.	20.00	18.00	24.18	16.00
Fire hydrants	14 hydrants.	35.00	40.00	39.60	36.00
Inlet controlling valves	46 valves.	350.00	350.00	357.50	425.00
Outlet regulating valves	46 "	550.00	600.00	605.00	600.00
Indicat. & record. ap. for each pair filt.	23 sets.	800.00	450.00	401.50	375.00
Indicat. & record. ap. in Adm. Bldg.	lump sum	500.00	750.00	781.00	750.00
Misc. W. I. and steel work	125,000 lbs.	0.05	0.05	0.04	0.03¾
Steel work in subway	160,000 "	0.04	0.05	0.04	0.03¾
Misc. C. I. work	40,000 "	0.04	0.04	0.04	0.03¾
Standard manhole frames and covers	28 M. H.	10.00	8.00	9.08	11.00
Electric manhole frames and covers	58 M. H.	15.00	10.00	13.20	12.00
Pipe gallery manhole frames and covers.	41 M. H.	5.00	7.00	6.88	7.50
Catchbasin frames and covers	51 C.B.	8.00	13.00	11.83	10.50
Ventilator frames and covers	604 Vent.	20.00	17.00	14.00	15.25
Skylights in gallery vaulting	117 Skyl.	225.00	75.00	99.00	85.00
Spiral stairways	8 stairways	250.00	250.00	278.00	250.00
Ventilating machinery	4 sets.	2,500.00	3,300.00	3,216.00	3,200.00
Gallery plumbing	8 half gal.	700.00	940.00	935.00	850.00
Gallery partitions	2,500 sq. ft.	0.30	0.60	0.53	0.56
Pipe railings	7,500 lin. "	0.50	0.85	0.77	0.75
Gallery furniture, lockers, etc.	lump sum	2,500.00	2,300.00	2,683.00	2,300.00
Painting interior subway & pipe gal.	23,000 sq. yds.	0.12	0.14	0.32	0.25
Steam pipe system	lump sum	12,000.00	13,000.00	12,124.00	13,000.00
Exterior gas pipe system	lump sum	1,200.00	1,410.00	726.00	1,050.00
Lead-lined iron pipe	2,000 lin. ft.	0.50	0.55	0.82	0.42
Terra cotta duct conduits	67,000 duct ft.	0.06½	0.10	0.10	0.10
Lap-welded steel pipe ducts	7,500 " "	0.40	0.40	0.36	0.34
High-tension arc cables, lamps, poles	lump sum	6,000.00	5,485.00	5,022.00	5,000.00
Exterior low-tension wiring and cables	lump sum	25,000.00	16,000.00	15,030.00	14,500.00
Gallery switchboard	8 sw.bds.	300.00	200.00	187.00	190.00
Filter switchboard	46 sw.bds.	100.00	90.00	83.00	90.00
Gallery wiring and lighting system	8 half gal.	1,500.00	1,650.00	1,463.00	1,375.00
Filter wiring and lighting system	46 filters.	1,000.00	1,400.00	1,276.00	1,276.00
Tel. cables, wiring and connections	lump sum	2,000.00	2,000.00	1,815.00	1,815.00
Central telephone switchboard	" "	800.00	425.00	380.00	380.00
Telephones	" "	700.00	600.00	527.00	530.00
Cables & wiring, clock & patrol box sys.	" "	4,000.00	3,500.00	3,262.00	3,300.00
Time clock system	" "	1,500.00	1,060.00	1,007.00	825.00
Patrol box systsem	" "	1,000.00	1,300.00	1,155.00	1,210.00
Lateral tile collectors	46 filters.	600.00	530.00	494.00	400.00
Filter gravel	55,000 cu. yds.	1.15	1.00	1.00	1.20
Filter sand	219,000 " "	1.00	0.85	1.00	1.40
12-in. Venturi meter	8 meters.	850.00	800.00	864.00	950.00
12-in. lap-welded steel pipe	3,250 lin. ft.	2.75	3.50	4.02	3.00
8-in. " " "	3,600 " "	1.40	1.90	1.49	1.65
6-in. " " "	8,000 " "	0.85	1.10	1.14	1.20
5-in. " " "	60,000 " "	0.65	0.85	0.77	0.82
3-in. " " "	160,000 " "	0.35	0.47	0.44	0.42½
10-in. spiral riveted sheet steel pipe	120 " "	1.50	4.00	1.05	2.00
8-in. " " " " "	1,650 " "	1.00	0.20	0.77	1.00
4-in. " " " " "	1,200 " "	0.40	0.50	0.44	0.50
3-in. flexible hose, Class A	7,800 " "	2.50	2.75	2.20	2.25
3-in. " " " B, with coup.	2,100 " "	0.90	1.25	1.60	1.60
4-in. " " " B, with coup.	1,800 " "	1.50	1.75	2.09	2.15

Quantity.		(1)	(2)	(3)	(4)
Hose connections at gallery entrances..	4 con.	75.00	35.00	66.00	12.50
3-in. composition male hose connections.	8,500 "	1.20	1.20	1.21	1.25
3-in. composition female hose connect'ns	6,900 "	1.75	2.20	2.20	2.15
Expansion ring apparatus & hose span..	lump sum	60.00	60.00	46.20	70.00
Sand washer apparatus.....	15 sets.	1,500.00	1,200.00	1,187.00	1,150.00
Portable sand ejectors....	15 ejec.	80.00	55.00	82.50	[illegible]
Flat bar track system....	46 filters.	1,200.00	1,300.00	1,650.00	1,200.00
Standard T-rail track system..........	46 "	2,200.00	3,000.00	3,762.00	2,650.00
Sand restoring tanks.....	8 tanks.	150.00	300.00	550.00	325.00
Sand scraping machines....	12 machs.	7,500.00	7,250.00	9,600.00	6,000.00
Sand restoring machines.....	6 "	7,500.00	8,940.00	11,200.00	6,000.00
Telford-macadam roadways, Class A....	15,000 sq. yds.	1.25	1.20	1.50	1.25
" " " B....	15,000 " "	1.20	1.20	1.50	1.15
Macadam paths	3,000 " "	1.00	0.60	0.75	0.70
Concrete curbs and butters............	1,000 lin. ft.	0.50	0.60	1.27	0.90
Paved gutters and channels............	4,000 sq. yds.	2.75	2.40	1.55	2.00
20-in. terra cotta drain pipe............	1,100 lin. ft.	1.00	1.00	0.85	1.00
18-in. " " " "	600 " "	0.80	0.90	0.69	0.90
15-in. " " " "	500 " "	0.60	0.70	0.56	0.80
10-in. " " " "	400 " "	0.35	0.50	0.40	0.50
8-in. " " " "	2,800 " "	0.28	0.40	0.29	0.30
6-in. " " " "	100 " "	0.20	0.25	0.25	0.30
4-in. " " " "	300 " "	0.15	0.20	0.22	0.15
Portable derricks....	1 derrick.	100.00	175.00	204.00	250.00
Trolley cranes in gate room....	2 cranes.	500.00	575.00	491.00	580.00
Impeller pumps in gate room..	2 pumps.	500.00	640.00	770.00	850.00
Portable sump pumps.....	1 pump.	250.00	220.00	164.00	500.00
Refrigerating apparatus....	lump sum.	3,500.00	2,500.00	3,321.00	2,320.00
Laboratory apparatus......	" "	3,500.00	2,900.00	2,499.00	3,000.00
Stone masonry of Adm. Bldg..........	" "	8,000.00	11,670.00	7,533.00	7,250.00
Brick masonry of Adm. Bldg.....	" "	7,500.00	8,000.00	6,965.00	6,765.00
Structural steel of Adm. Bldg..........	" "	6,000.00	6,460.00	5,726.00	4,930.00
Fireproofing of Adm. Bldg....	" "	2,700.00	3,300.00	2,814.00	2,750.00
Carpenter work of Adm. Bldg............	" "	5,000.00	5,500.00	5,284.00	5,500.00
Tile roofing of Adm. Bldg.............	" "	1,700.00	1,650.00	1,802.00	1,480.00
Sheet metal of Adm. Bldg	" "	1,000.00	1,050.00	990.00	932.00
Plastering of Adm. Bldg.......... ...	" "	1,400.00	1,380.00	1,422.00	1,360.00
Floors and marble work of Adm. Bldg..	" "	3,500.00	3,500.00	3,987.00	3,080.00
Electric wiring of Adm. Bldg..........	" "	3,000.00	2,700.00	3,575.00	2,460.00
Plumbing, gas piping, of Adm. Bldg....	" "	2,500.00	2,170.00	2,557.00	1,800.00
Heat. and vent. apparatus of Adm. Bldg.	" "	2,800.00	3,300.00	3,169.00	3,018.00
Refrigerator room of Adm. Bldg........	" "	2,100.00	3,100.00	2,253.00	2,400.00
Laboratory cases of Adm. Bldg........	" "	4,500.00	4,900.00	4,734.00	4,950.00
Hardware of Adm. Bldg....	" "	1,400.00	1,370.00	1,483.00	1,140.00
Painting, glazing, etc., of Adm. Bldg...	" "	2,500.00	1,900.00	4,111.00	3,335.00
Elevator of Adm. Bldg................	" "	2,700.00	3,100.00	3,085.00	2,500.00
Office furniture of Adm. Bldg..........	" "	1,500.00	1,600.00	1,363.00	1,450.00
Stone masonry of Supt.'s house.........	" "	500.00	460.00	463.00	320.00
Brick masonry of Supt.'s house........	" "	3,750.00	3,860.00	4,344.00	3,575.00
Carpenter work of Supt.'s house......	" "	5,500.00	5,800.00	5,598.00	6,100.00
Tile roofing of Supt.'s house...........	" "	900.00	1,000.00	924.00	880.00
Sheet metal work of Supt.'s house......	" "	1,400.00	1,400.00	1,489.00	1,175.00
Plastering of Supt.'s house.............	" "	500.00	620.00	451.00	450.00
Granolithic floors, Supt.'s house & stable	600 sq. yds.	1.85	3.30	2.04	1.75
Electric wiring, Supt.'s house..........	lump sum.	500.00	450.00	537.00	410.00
Plumbing, gas piping, of Supt.'s house..	" "	1,200.00	1,300.00	1,247.00	1,200.00
Heating apparatus of Supt.'s house....	" "	400.00	400.00	410.00	365.00
Hardware of Supt.'s house	" "	350.00	350.00	351.00	300.00
Painting of Supt.'s house..............	" "	1,000.00	1,060.00	1,053.00	880.00
Office furniture of Supt.'s house......	" "	500.00	580.00	603.00	525.00
Stone masonry of stable...............	" "	300.00	250.00	407.00	150.00
Brick masonry of stable...............	" "	4,400.00	4,240.00	4,820.00	4,340.00
Structural steel of stable..............	" "	600.00	730.00	600.00	585.00
Carpenter work of stable..............	" "	4,000.00	2,500.00	4,376.00	4,675.00
Tile roofing of stable................	" "	1,700.00	1,940.00	1,702.[illegible]	1,720.00
Sheet metal of stable.......	" "	900.00	860.00	910.00	850.00
Plastering of stable.......	" "	500.00	500.00	462.00	400.00
Electric wiring of stable..............	" "	350.00	270.00	406.00	250.00
Plumbing, gas piping, of stable.........	" "	1,200.00	1,260.00	1,331.00	1,050.00
Heating apparatus of stsable..........	" "	800.00	900.00	847.00	815.00
Hardware of stable	" "	800.00	800.00	854.00	710.00
Painting of stable.....	" "	700.00	630.00	768.[illegible]	480.00
Concrete arch bridges...................	2 bridges.	4,000.00	3,250.00	3,675.00	3,900.00
Concrete entrances to galleries........	8 entrances.	2,500.00	1,600.00	3,000.00	2,580.00
Gate entrances.....	4 "	1,800.00	2,120.00	2,607.[illegible]	2,280.00
Hedges	10,000 lin. ft.	0.15	0.10	0.30	0.14
General planting.....	lump sum.	6,000.00	5,300.00	10,000.00	4,500.00
Seeding....	80 acres.	50.00	47.00	125.00	48.00
Sodding........	7,000 sq. yds.	0.50	0.30	0.38	0.30
Support tracks, pipe across rights way..	lump sum.	10,000.00	15,000.00	500.00	6,000.00
Totals		$3,492,041	$3,303,020	$3,787,388	$3,551,491

FILTRATION PLANT.—Pittsburg, Pa.—Bids were received March 8 by Department Public Works, Bureau of Filtration, for work under Contract No. 6, which calls for sand washer pumps, electric machinery, auxiliary equipment and appurtenances for new pumping station, the contract being awarded to T. A. GILLESPIE CO. The bids received and engineer's estimate were as follows: (1) Engineer's estimate; (2) T. A. Gillespie Co.; (3) Daniel J. McNichol; (4) Booth & Flinn, Ltd.:

Bids Received at Pittsburg, Pa., March 8, for Filtration Plant. Contract No. 6.

Quantity.		(1)	(2)	(3)	(4)
2 5,000,000-gall. wash water pumps........	....	$11,500.00	$10,900.00	$11,500.00	$15,207.50
2 5,000,000-gall. wash water pumps (alt. bid)	....	....	....	....	11,825.00
1 3,000,000-gall. wash water pump.........	....	8,000.00	7,500.00	10,450.00	9,157.00
1 3,000,000-gall. wash water pump (alt. bid).	....	....	....	....	8,690.00
2 motor-driven air pumps...............	....	1,000.00	2,000.00	1,293.00	2,750.00
3 direct-current generator sets............	....	7,000.00	6,000.00	9,421.00	7,488.99
3 direct-current generator sets (alt. bid).....	....	....	....	....	....
1 motor-driven arc light generator........	....	2,500.00	2,420.00	2,756.00	2,640.00
1 motor-driven arc light generator (alt. bid).	....	....	....	....	....
1 set condens. ap. for eng. for gen. sets....	....	3,500.00	4,250.00	2,640.00	4,213.00
Switchboard, etc....	lump sum.	2,800.00	3,318.00	3,650.00	3,410.00
1 motor-driven triplex boiler feed pump....	....	1,500.00	1,100.00	2,035.00	2,035.00
1 duplex boiler feed steam pump..........	....	500.00	500.00	550.00	550.00
2 filtered water supply steam pumps........	....	500.00	450.00	539.00	621.50
1 12-in. centrif. circ. pump, motor, etc......	....	1,800.00	1,700.00	2,730.00	1,870.00
1 6-in. centrif. sump pump, motor, etc.....	....	400.00	680.00	688.00	440.00
1 2-in. centrif. sump pump, motor, etc.....	....	300.00	390.00	396.00	286.00
Steam piping, valves, etc..................	lump sum.	12,000.00	12,112.00	12,325.00	12,112.00
Exhaust piping, valves, etc..............	" " .	3,000.00	3,950.00	4,052.00	3,684.00
Boiler feed valves, etc.....	" " .	2,500.00	3,133.00	3,447.00	2,750.00
Drip piping, traps, valves................	" " .	600.00	700.00	869.00	790.00
Blow-off piping, traps, valves.............	" " .	800.00	905.00	996.00	750.00
Cold-water piping, valves...	" " .	7,200.00	9,000.00	9,685.00	8,804.00
Lead-lined wrought-iron pipe..	" " .	250.00	250.00	275.00	250.00
Oiling system......	" " .	1,200.00	1,569.00	1,726.00	1,952.00
4 feed-water filters, etc..	....	750.00	537.50	1,276.00	1,045.00
1 electric traveling crane..........	....	4,000.00	3,200.00	4,263.00	3,844.00
1 electric locomotive.....	....	4,500.00	3,285.00	4,714.00	4,713.00
1 ash car.......	....	1,200.00	1,000.00	1,220.00	1,650.00
1 track hopper hatch.....................	....	300.00	320.00	352.00	352.00
2 platform scales.............. ..	....	25.00	20.00	22.00	27.50
8 weighing coal hoppers....................	....	350.00	350.00	259.00	551.75
Weighing tanks......	lump sum.	200.00	150.00	300.00	275.00
Special gages.......	" " .	450.00	260.00	393.00	440.00
1 24-in. engine lathe........	....	1,500.00	1,660.00	1,485.00	1,661.00
1 12-in. engine lathe..........	....	880.00	770.00	754.00	852.00
1 12-in. speed lathe.........	....	500.00	500.00	710.00	533.00
1 10-in. pipe machine........	....	1,600.00	1,635.00	1,870.00	1,633.00
1 25-in. upright drill press...............	....	500.00	533.00	297.00	530.00
1 24-in. shaper........	....	1,000.00	1,370.00	737.00	1,369.00
Grinding machinery.......	lump sum.	500.00	488.00	479.00	407.00
1 pipe rack.........	....	150.00	150.00	150.00	110.00
Forge, anvil, etc....	lump sum.	350.00	352.00	347.00	335.00
Totals.......		$119,250	$119,200	$139,588	$135,434

TRADE PUBLICATIONS.

(The standard sizes for pamphlets and trade catalogues recommended by all the principal engineering societies of the United States are: 3½ x 6 ins., 6 x 9 ins., and 9 x 12 ins.)

STEEL, IRON, MACHINES AND TOOLS.—Scully Steel & Iron Co., Chicago, Ill. 4½ x 7 ins.; pp. 144.

This is a stock list for January and February.

TARRED PAPERS AND ROOFING.—Barrett Manufacturing Co., Chicago and New York. 5 x 8 ins.; pp. 24.

The uses of the Amatite roofing paper are set forth.

SHAKING GRATES.—Donegan & Swift, 6 Murray St., New York. 8 x 11 ins.; pp. 28.

Swift's "Imperial" grates are illustrated and described.

ROCK AND ORE BREAKERS.—Allis-Chalmers Co., Milwaukee, Wis. 8 x 10 ins.; pp. 36.

This catalogue is devoted to the Gates gyratory crusher, which is well described and illustrated, tables being given of sizes and capacities.

PUMPS.—The Snider-Hughes Co., Cleveland, O. 4½ x 7 ins.; pp. 24.

This catalogue is devoted to the Monitor Duplex steam pump.

BELT CONVEYORS.—Ridgway Belt Conveying Co., 29 Broadway, New York. 9 x 12 ins.; pp. 4.

The Ridgway two-belt conveying system is illustrated and the merits of this system are discussed.

ROOFING FELT.—American Asphaltum & Rubber Co., 721-2-3 Woman's Temple, Chicago, Ill. 3½ x 6 ins.; pp. 8.

The merits of the "Pariette" ready roofing material are set forth in this pamphlet.

SAND RIDDLING MACHINES.—Thomas W. Pangborn Co., 42 Dey St., New York. 6 x 9 ins.; pp. 12.

This catalogue is largely taken up with photographs of various types of shaking screens, or riddles, for use in foundries.

WIRE ROPE HAULAGE.—Jeffrey Mfg. Co., Columbus, O. Paper; 8 x 10 ins.; pp. 6; illustrated.

This pamphlet shows a haulage system for coal mines, carrying the cars from the mine to the tipple. The cable is fitted with lugs at short intervals.

WIRE LATH.—Clinton Wire Cloth Co., Clinton, Mass. Paper; 6 x 9 ins.; pp. 12; illustrated.

This pamphlet illustrates the use of wire lath in the fireproof construction of the new buildings of the U. S. Naval Academy at Annapolis, Md.

LOGGING TRUCKS AND CARS.—Russell Wheel & Foundry Co., Detroit, Mich. Paper; oblong; 6¼ x 3½ ins.; pp. 20; illustrated.

Various styles of trucks and cars are shown for handling logs and lumber, with views of heavily loaded trucks.

COAL YARDS AND COAL HANDLING MACHINERY.—Borden & Selleck Co., 48-50 Lake St., Chicago, Ill. 6 x 9 ins.; pp. 16.

Line cuts and photographs illustrate some of the plants designed and erected by this company for the storage and handling of coal.

DUMPING CARTS AND WAGONS.—Hobson & Co., 17 State St, New York, 6 x 9 ins.; pp. 20.

One-horse dump carts of various sizes, and four-wheeled dump carts, are illustrated and tabular data given as to the capacity, dimensions, etc. Hand-made cart harnesses are also illustrated.

STEAM ROAD ROLLERS.—Julian Scholl & Co., 126 Liberty St., New York. 8 x 10 ins.; pp. 8.

The three-wheeled double-cylinder steam road roller manufactured by this company is described and some excellent photographs show it at work rolling macadam roads in New York State.

PORTLAND CEMENT.—Chicago Portland Cement Co., Stock Exchange Building, Chicago. Paper; 5 x 7½ ins.; pp. 8; illustrated.

This attractive little circular contains views of the company's plant and of three bridges in which its cement was used.

CONDUITS AND INSULATORS.—Standard Vitrified Conduit Co., 39 Cortlandt St., New York. Paper; 8 x 11 ins.; pp. 4; illustrated.

Illustrations of single and multiple-tile conduit for electric cables, with a few words on the Manhattan type of third-rail insulator, are presented here.

WIRES AND CABLES.—American Steel & Wire Co., New York. Paper; 5 x 8 ins.; pp. 4; illustrated.

Some of the leading manufactures of the company in the line of insulated wires and cables are illustrated here. All classes of electric distributing service appear to be covered.

ROLLER BEARINGS.—Hyatt Roller Bearing Co., Paterson, N. J. Paper; 6¼ x 8¾ ins.; pp. 8; illustrated.

Bulletin No. 117 is devoted to the application of Hyatt flexible roller bearings to shop cars, trucks, cranes and similar machines. Sketches and tables show the several available forms and sizes of bearings for such work.

HOT BLAST SMELTER.—The Vencedora Mine Equipment Co., 331 Pine St., San Francisco, Cal. 3½ x 6 ins.; pp. 10.

This pamphlet states that a novel pyritic smelting furnace can be seen in operation at the Fulton Irow Works in San Francisco. A photograph shows a smelter of this type, of 5-ton capacity and prospectors' size.

WATER-PROOF LEATHER BELTS.—Graton & Knight Manufacturing Co., Worcester, Mass. 3½ x 6 ins.; pp. 4.

This folder states that leather belts can be furnished, that will run satisfactorily in damp places or wholly submerged in water. References from a number of mill operators are given.

AIR COMPRESSORS.—Norwalk Iron Works Co., South Norwalk, Conn. 4 x 8 ins.; pp. 6

This folder describes an air compressor which supplies air at two different working pressure: as, for example, 20 pounds and 80 pounds, the low pressure being used for sand blasting, and the like, and the high pressure for operating pneumatic tools.

MOTOR BICYCLES.—Pope Manufacturing Co., Hartford, Conn. Paper; 6 x 9 ins.; pp. 4; illustrated.

A motor bicycle, gasoline driven, is advertised here. An interesting special feature illustrated is a spring sprocket which eases the jerks of the engine. The sprocket is similar in principle to the elastic couplings sometimes used in driving dynamos.

HYDRAULIC PRESSES AND GASOLINE ENGINES.—The Hydraulic Press Manufacturing Co., Mt. Gilead, O. 6 x 6 ins.; pp. 8.

Cider and wine presses, veneer presses, gas and gasoline engines, are illustrated. Contractors will be interested in a portable wood-saw outfit, operated by a 6 to 8 HP. gasoline engine.

GRAPHITE PAINT.—International Acheson Graphite Co., Niagara Falls. 4½ x 7½ ins.; pp. 24.

This graphite is not a naturally mined graphite, but an artificial product manufactured in an electric furnace, and it is claimed that it possesses great merit as a paint. The cable shield of the Williamsburg bridge is composed of Acheson graphite and slushing oil.

ROAD-MAKING MACHINERY.—American Road Machine Co., Kennett Square, Pa. 7 x 9 ins.; pp. 52.

The well-known "Champion" rock crushers, road machines, road rollers and distributing carts are described and illustrated, tables of dimensions, weights, capacities, etc., being given. Street sprinklers, plows, scrapers and portable engines are also illustrated and briefly described.

REINFORCED CONCRETE CONSTRUCTION.—The Brayton Engineering Co., New York Life Building, St. Paul, Minn. Paper, oblong; 7½ x 5 ins.; pp. 94; illustrated.

The special feature of the Brayton system of building construction is that the steel reinforcement is self-supporting and can be built up in advance of the concrete. The structural features are described, together with computations for beams and slabs.

SIGNALING AND INTERLOCKING.—Union Switch & Signal Co., Swissvale, Pa. Paper; 6 x 9 ins.; pp. 64; illustrated.

The above noted booklet is Section 11 of the company's general catalogue. It covers in detail electric locks, electric slots, hand releases and time locks, all referring to signal and interlocking work. Drawings, photographs and tables of parts and prices are given.

ROAD ROLLERS AND TRACTION ENGINES.—American Road Roller Co., 156 Fifth Ave., New York. 3½ x 6 ins.; pp. 16.

Steam road rollers from 10 to 15 tons, asphalt rollers from 6 to 9 tons, traction engines from 12 to 20 HP., rock crushers, sanding wagons, water wagons, street sweeping and cleaning machines, are illustrated and briefly described.

MACHINERY AND TOOLS.—Brown & Sharpe Manufacturing Co., Providence, R. I. 3½ x 6 ins.; pp. 494.

This catalogue gives data relating to milling machines of various types, gear cutters, vices, grinding machines, screw-making machines, metal saws, cutting tools, plumb bobs, gages, calipers, dividers, rules and protractors, etc. The tabular data and price lists make this catalogue a good book of reference particularly since it is well indexed.

PNEUMATIC TOOLS.—Pedrick & Ayer Co., New York. Paper; 6 x 9 ins.; pp. 56; illustrated.

In this general catalogue, pneumatic tools occupy the principal place. There are pneumatic punches, air hoists, cranes for air hoists, riveters, and the like. A number of other tools are shown, among them a boring bar for compound locomotive cylinders, a portable rotary planer for valve seats, and others.

ELEVATING AND CONVEYING MACHINERY.—The C. O. Bartlett & Snow Co., Cleveland, O. 6 x 9 ins.; pp. 334.

Special coal loading machinery, sand and gravel diggers, paint mills and mixers, gas engines, derrick hoists, steam dryers, helicoid conveyors, cable tramways, belt conveyors, bucket elevators, rotary screens, gear wheels, sprocket wheels and chains, are illustrated and accompanied by price lists of the different sizes and types. An index makes ready reference possible.

TESTING MACHINES.—Riehlé Bros. Testing Machine Co., 1424 N. 9th St., Philadelphia. Paper; 9¼ x 12¼ ins.; pp. 32; illustrated.

This is only a supplement to the company's main catalogue, and has the purpose of presenting some special machines and devices recently brought out. A set of testing levers for calibrating a vertical testing machine, a 300-ton screw testing machine, a car bolster testing machine, torsion and extension indicators, and a number of other machines and tools, are shown and briefly described.

PURE WATER.—The American Pure Water Supply Co., Ashtabula, O. Paper; 4 x 9 ins.; pp. 12; illustrated.

Rain water from roofs is stored in closed tanks and distributed under air pressure. The air compressor may be operated by hand, or, where city water is available, by a water motor. Accessories on which the claims for purity are based include means for diverting the first yield of rain water to the sewer until the roof has been washed clean, aeration and automatic cleaning of the cistern, but the pamphlet does not explain how these things are done. Before distribution it is stated that the water is cooled. This pamphlet is concerned more particularly with water for school buildings.

CONTRACT PRICES.

FILTRATION PLANT.—Pittsburg, Pa.—The following are the bids for work under Contract No. 8, which calls for construction of river wall, intakes, connections and appurtenances, in connection with new muni filtration plant; (1) Engineer's estimate; (2) T. A. GII PIE CO.; (3) Daniel J. McNichol; (4) Booth & Fi Ltd.; (5) Dravo Contracting Co.:

Bids Received at Pittsburg, Pa., March 8, for Filtration Plant. Contract No. 8.

	Quantity.	(1)	(2)	(3)	(4)	(5)
General excavation	9,700 cu. yds..	$0.60	$1.75	$1.00	$1.55	$1.50
Excavation in cofferdam	3,000 " " ..	0.60	1.75	1.00	2.55	2.50
Embankment, Class A	54,000 " " ..	0.30	0.26	0.20	0.52	0.50
Embankment, Class B	127,000 " " ..	0.35	0.41	0.25	0.44	0.45
Slag or gravel lining of revetment	2,200 " " ..	0.35	0.45	0.60	0.62	0.60
Cofferdam	lump sum	3,000.00	3,450.00	10,000.00	9,000.00	[illegible]
Timber piles	1,300 lin. ft.	0.60	0.34	0.45	0.38	0.40
Timber for footing	8 M. ft.	50.00	40.00	40.00	55.00	60.00
Concrete in floors, Class A	230 cu. yds..	7.00	4.60	6.00	5.30	5.50
" in walls, Class C	320 " " ..	7.00	7.00	8.00	5.80	6.00
" in intake, Class F	2,500 " " ..	6.50	6.00	12.00	4.90	5.00
" reinforced, Class I	830 " " ..	8.50	6.70	13.00	6.00	6.00
" in trench, Class J	220 " " ..	5.50	3.70	5.00	4.60	4.50
" in revetment, Class K	1,200 " " ..	5.50	5.10	7.00	4.90	5.00
Change in ratio of cement	100 " " ..	0.50	0.35	0.56	0.40	0.40
Steel reinf. in conduits, etc.	96,000 lbs.	0.05	0.02¼	0.04	0.038	0.04
Brick masonry	40 cu. yds..	15.00	9.75	12.00	11.00	10.00
Waterproofing, Class A	750 sq. yds..	0.30	0.55	0.60	0.76	0.75
Waterproofing, Class B	140 " " ..	0.50	0.90	0.70	1.50	1.50
96-in. steel pipe, ½-in. plate	360 lin. ft.	27.00	25.00	25.65	24.50	25.00
36-in. " " ⅜-in. "	365 " " ...	7.40	8.40	7.81	7.60	7.50
30-in. " " ⅜-in. "	300 " " ...	6.75	7.40	6.93	6.00	6.00
30-in. " " ¼-in. "	770 " " ...	4.50	6.00	5.17	5.20	5.00
Cast steel specials	9,600 lbs.	0.06	0.16	0.16	0.14	0.15
96-in. Venturi meter	1 meter	3,500.00	3,100.00	2,800.00	2,900.00	[illegible]
C.-I. hub and spigot pipe	65 tons	45.00	38.50	35.20	39.00	40.00
C.-I. hub and spigot specials	4.3 "	100.00	86.00	73.70	80.00	80.00
C.-I. flanged pipe and specials	80 "	100.00	103.00	93.50	84.00	85.00
6-ft. × 9-ft. hand op. sluice gates	2 gates	1,800.00	1,730.00	1,760.00	1,250.00	1,300.00
48-in. circ. hand op. sluice gates	8 "	400.00	660.00	500.00	625.00	600.00
36-in. disc. valve	8 valves	350.00	210.00	303.00	225.00	230.00
24-in. hand op. fl. stop valves	8 " ...	225.00	165.00	161.00	190.00	200.00
18-in. stop valves	6 " ...	100.00	110.00	88.00	130.00	125.00
10-in. " "	1 " ...	35.00	35.00	30.80	30.00	30.00
8-in. " "	2 " ...	22.00	24.00	25.00	25.00	24.00
6-in. " "	5 " ...	15.00	19.00	15.95	15.00	14.00
36-in. motor op. stop valves	4 " ...	700.00	865.00	770.00	640.00	650.00
30-in. motor op. stop valves	2 " ...	550.00	650.00	655.00	590.00	600.00
30-in. do., with 6-in. plug valve	1 " ...	800.00	600.00	605.00	530.00	525.00
72-in. hyd. op. stop valve, 8-in. by-pass	1 " ...	4,500.00	3,500.00	3,355.00	2,618.00	2,700.00
36-in. hyd. op. stop valve, 6-in. by-pass	1 " ...	850.00	700.00	583.00	720.00	700.00
48-in. check valves	4 " ...	1,600.00	1,350.00	*14.85	1,380.00	1,400.00
Fire hydrants	2 hydrants.	35.00	40.00	39.60	40.00	40.00
Misc. W. I. and steel work	18,000 lbs.	0.05	0.03½	0.04	0.04½	0.05
Standard M. H. frames and covers	6 manholes	10.00	8.00	9.00	13.00	12.00
Electric M. H. frames and covers	6 "	15.00	11.00	13.00	16.00	15.00
Catchbasin M. H. frames and covers	6 C. B.	10.00	13.00	11.83	16.00	15.00
Pipe railings	360 lin. ft.	0.50	0.80	0.77	0.50	0.50
Steam piping system	lump sum	1,250.00	2,000.00	1,889.00	3,200.00	3,000.00
Exterior gas pipe system	270 lin. ft.	0.80	0.85	0.50	0.85	0.83⅓
Lead-lined W. I. pipe	470 " " ...	0.50	0.50	0.82	0.60	0.50
Terra cotta duct conduits	10,000 duct ft.	.065	0.09	0.10	0.10	0.10
Lap-welded steel pipe ducts	1,700 " " ..	0.40	0.37	0.36	0.35	0.40
High tension arc cables, lamps, poles	lump sum	1,500.00	1,600.00	1,546.00	1,200.00	1,250.00
Exterior low tension wiring, cables	" "	3,000.00	2,600.00	2,497.00	2,250.00	2,200.00
Telephone and patrol wiring and cables.	" "	200.00	360.00	345.00	242.00	250.00
Propeller pump	1 pump	800.00	1,800.00	1,500.00	480.00	500.00
Fire hose	300 lin. ft.	1.00	0.66	1.10	0.95	1.00
Telford-macadam roadways	2,600 sq. yds..	1.30	1.15	1.50	1.30	1.30
Granolithic paths	220 " " ..	1.75	1.60	1.85	1.60	1.50
Concrete curbs and gutters	2,700 lin. ft.	0.50	0.66	2.10	0.76	0.80
8-in. terra cotta drain pipe	400 " " ...	0.30	0.22	0.60	0.20	0.20
Standard gage railroad siding	2,500 " " ...	1.25	2.30	2.41	2.05	2.00
Seeding	4 acres	50.00	46.00	124.00	40.00	40.00
Sodding	380 sq. yds..	0.50	0.30	0.35	0.30	0.30
Totals		$194,817	$212,647	$208,552	$228,538	$229,338

*Probably should be $1,485, which makes total $214,433.

FILTRATION PLANT.—Pittsburg, Pa.—The following are the bids for work under Contract No. 10, which calls for construction of pipe line and appurtenances, Highland Reservoir No. 2 to South Side, in connection with the erection of the municipal filtration plant; (1) Engineer's estimate; (2) T. A. GILLESPIE CO.; (3) Daniel J. McNichol & Co.; (4) Booth & Finn, Ltd.; (5) O'Herron & McQuade, Pittsburg:

Bids Received at Pittsburg, Pa., March 8, for Filtration Plant. Contract No. 10.

	Quantity.	(1)	(2)	(3)	(4)	(5)
Excavation in Hihgland Park	4,500 cu. yds..	$0.30	$0.41	$0.60	$0.75	$0.50
Excavation, extra, in streets	4,500 " " ..	0.65	0.84	0.80	0.95	1.25
Rock excavation	100 " " ..	3.50	4.83	1.50	2.50	6.00
Dolled embankment, Highland Park	12,000 " " ..	0.40	0.37	0.30	0.58	1.00
50-in. steel pipe, ⅜-in., in High. Park.	1,700 lin. ft.	10.00	10.06	9.02	11.00	9.05
50-in. steel pipe, ⅜-in., not in High. P.	16,600 " " ...	12.00	11.83	11.11	10.58	12.10
50-in. steel pipe, ½-in. thick	8,000 " " ...	16.00	13.83	12.98	12.55	14.77
36-in. steel pipe, ⅜-in. thick	3,000 " " ...	8.50	9.73	9.24	9.79	8.87
36-in. dou.-riv. steel pipe, ½-in., riv. c.	1,100 " " ...	15.00	22.25	40.00	24.00	39.00
Extra heavy 4-in. W. I. pipe	200 " " ...	2.50	1.75	1.20	2.00	1.50
C. I. hub and spigot pipe	60 tons	50.00	42.00	35.20	48.00	65.00
C. I. hub and spigot specials	35 "	85.00	75.35	73.70	100.00	150.00
C. I. flanged pipe and specials	10 "	100.00	118.34	93.50	100.00	170.00
48-in. Venturi meter	1 meter	2,600.00	3,625.00	3,718.00	4,000.00	3,480.00
36-in. Venturi meter	1 "	1,450.00	2,175.00	2,222.00	2,200.00	2,220.00
42-in. stop valves, by-pass, bev. gear..	1 valve	800.00	921.00	856.00	1,000.00	1,052.00
36-in. " " " " " ..	4 "	550.00	654.00	567.00	620.00	741.00
30-in. " " " " " ..	3 "	450.00	452.00	369.00	425.00	469.00
24-in. " " " spur " ..	2 "	250.00	265.00	226.00	260.00	273.50
20-in. " " " " " ..	3 "	150.00	161.00	149.00	160.00	194.00
18-in. " " " " " ..	1 "	125.00	161.00	132.00	130.00	240.00
10-in. " " without gears	2 "	35.00	42.25	42.90	35.00	49.45
8-in. " "	6 "	22.00	36.25	36.30	25.00	34.45
6-in. " "	2 "	17.00	30.20	28.00	15.00	21.00
1½-in. air valves	11 "	20.00	36.00	11.00	15.00	19.10
Chambers for 42, 36, 30-in. valves	8 cham.	150.00	169.00	320.00	170.00	100.00
" " 24, 20, 18-in. valves	6 "	140.00	107.50	220.00	125.00	60.00
" " 16-in. & smaller valves.	18 "	60.00	54.50	97.90	36.00	30.00
Brick manholes	33 manholes..	70.00	56.00	75.00	36.00	30.00
Concrete in culverts, pump cham., F.	100 cu. yds.	7.00	6.65	12.00	12.00	10.00
Concrete in trench around pipe, J.	4,000 " " ...	6.00	5.10	5.00	6.30	8.00
Concrete around pipe, river cross, L..	1,000 " " ...	10.00	5.36	16.00	9.80	12.00
Steel pump chamber	lump sum	1,200.00	1,840.00	715.00	2,100.00	1,080.00
Timber piles	1,500 lin. ft.	0.50	0.32	0.45	0.40	0.40
Lumber in caps, platform cradles	5 M. ft. B. M.	40.00	42.00	40.00	45.00	40.00
Moving 12, 10, 8, 6 & 4-in. C. I. pipe.	4,900 lin. ft.	0.10	0.10	0.40	0.50	0.30
Resetting fire hydrants	1 hydrant..	20.00	12.00	19.31	25.00	30.00
Changing water services, 2-in. & small.	60 serv.	15.00	4.80	25.24	7.50	10.00
Changing gas services	60 "	15.00	6.00	25.24	7.00	10.00
15-in. terra cotta pipe	400 lin. ft.	0.90	0.36	1.50	1.00	1.00
10-in. terra cotta pipe	700 " " ...	0.75	0.32	0.90	0.75	0.50
8, 6 and 4-in. terra cotta pipe	1,000 " " ...	0.60	0.25	0.65	0.50	0.75
Large catchbasins	6 basins	90.00	60.00	50.00	65.00	80.80
Small catchbasins	5 "	35.00	30.00	40.00	25.00	50.00
Resetting curbing	2,500 lin. ft.	0.25	0.15	0.38	0.38	0.40
Asphalt paving	20,000 sq. yds.	2.10	2.30	3.25	2.60	2.35
Relaying stone paving	800 " " ...	1.00	1.25	1.00	1.50	1.00
Seeding	2 acres	60.00	36.00	124.00	40.00	50.00
Sodding	800 sq. yds.	0.50	0.60	0.35	0.30	0.60
Macadam path	200 " " ...	1.15	0.73	1.50	1.50	1.50
Extra, crossing steam R. R. tracks	lump sum	2,500.00	7,245.00	1,250.00	3,600.00	2,000.00
Extra work houses, Boundary St. and Schenley Es.	" "	2,500.00	895.00	1,500.00	1,600.00	1,000.00
Extra work property Jones & Laughlin Steel Co.	" "	2,500.00	7,245.00	600.00	5,000.00	2,000.00
Totals		$491,096	$489,826	$511,142	$477,544	$528,570

FILTRATION PLANT.—Pittsburg, Pa.—Bids were received March 8 by Board Public Works, Bureau of Filtration, for work under Contract No. 2, which calls for construction of filtered water reservoir and appurtenances, in connection with the erection of the city filtration plant. The bids received and engineer's estimate were as follows: (1) Engineer's estimate; (2) T. A. GILLESPIE CO. (awarded contract); (3) Daniel J. McNichol & Co., Philadelphia; (4) Booth & Flinn, Ltd., Pittsburg; (5) J. McNally & Co., Pittsburg:

Bids Received at Pittsburg, Pa., March 8, for Filtration Plant. Contract No. 2.

	Quantity.	(1)	(2)	(3)	(4)	(5)
General excavation	130,000 cu. yds.	$0.20	$0.30	$0.40	$0.31	$0.41
Excavation in trench	1,500 " "	0.60	0.70	0.75	0.60	0.80
Embankment	180,000 " "	0.25	0.25	0.20	0.39	0.15
Filling over vaulting	26,000 " "	0.25	0.30	0.30	0.40	0.41
General filling	15,000 " "	0.10	0.12	0.35	0.60	0.41
Puddle, Class A	2,000 " "	1.25	0.85	1.80	1.35	1.40
Puddle, Class B	14,000 " "	2.00	1.75	3.00	2.70	1.70
Broken stone or gravel filling	3,400 " "	0.60	0.50	0.50	0.60	1.00
Slag or gravel lining in revetment	5,700 " "	0.35	0.50	0.50	0.60	1.00
Timber piles	3,400 lin. ft.	0.60	0.40	0.45	0.36	0.50
Timber for footing	20 M. ft. B. M.	50.00	40.00	40.00	42.00	40.00
Concrete in floors, Class A	7,500 cu. yds.	6.50	5.40	6.00	6.00	5.00
Concrete in floors, Class A-1	1,000 " "	6.75	5.40	7.08	6.35	6.00
Concrete in walls, Class C	9,000 " "	7.00	5.40	7.50	6.50	5.50
Concrete in piers, Class D	2,500 " "	8.00	6.40	9.60	7.50	6.00
Reinforced concrete in piers	1,100 " "	15.00	15.00	10.00	8.50	6.50
Concrete in vaulting, Class E	6,200 " "	6.50	4.70	5.25	5.10	6.00
Arch centering for vaulting	243,000 sq. ft.	0.10	0.08½	0.10	0.07½	0.08
Concrete in gate chamber, Class F	1,500 cu. yds.	7.00	7.00	8.80	7.75	6.00
Reinf. concr. in conduits & drain, Cl. H.	1,600 " "	9.50	7.00	12.00	9.00	6.00
Concrete in trench, Class J	130 " "	6.00	7.00	5.50	7.00	7.00
Concr. in revet. slope paving, Cl. K	3,600 " "	5.50	7.00	7.00	4.50	5.00
Change in ratio of cement	100 " "	0.50	0.35	0.64	0.45	0.50
Steel reinf. in condu. & drains, Cl. A	217,000 lbs.	0.05	0.02¼	0.04	0.031	0.03½
Steel reinf. in vaulting, Class B	354,000 "	0.03	0.02¼	0.04	0.03	0.03½
Misc. steel reinf., Class C	14,000 "	0.04	0.02¼	0.04	0.03	0.04
Brick masonry	50 cu. yds.	15.00	12.00	12.00	10.00	15.00
C. I. hub and spigot pipe	140 tons	45.00	45.00	35.20	45.00	42.00
C. I. hub and spigot specials	8 "	85.00	100.00	73.20	100.00	70.00
C. I. flanged pipe and specials	24 "	100.00	120.00	93.50	100.00	70.00
6-ft. × 9-ft. motor oper. sluice gate	1 gate	2,400.00	2,200.00	2 310.00	1,650.00	2,200.00
6-ft. × 8-ft. motor oper. sluice gates	3 gates	2,100.00	2,200.00	2,145.00	1,760.00	2,150.00
6-ft. × 7-ft. motor oper. sluice gates	2 "	1,850.00	2,000.00	2,063.00	1,650.00	2,000.00
30-in. circ. hand oper. sluice gate	1 gate	250.00	475.00	329.00	340.00	130.00
24-in. circ. hand oper. sluice gate	1 "	150.00	320.00	215.00	210.00	75.00
Yellow pine lumber, etc., for stop planks.	10 M. ft. B.M.	60.00	150.00	95.00	75.00	40.00
24-in. stop valves	3 valves	225.00	200.00	143.00	200.00	175.00
12-in. stop valves	4 "	60.00	75.00	42.50	60.00	35.00
6-in. stop valves	3 "	18.00	35.00	19.25	18.00	12.00
Fire hydrants	5 hydrants.	35.00	40.00	39.60	40.00	53.00
Steel weir, etc	lump sum	300.00	140.00	203.00	150.00	350.00
Measuring apparatus	" "	100.00	150.00	250.00	200.00	150.00
Miscellaneous W. I. and steel work	17,000 lbs.	0.08	0.05	0.05	0.049	0.03½
Miscellaneous C. I. work	20,000 "	0.04	0.04	0.05	0.035	0.03½
Ventilating frames and covers	26 sets	15.00	18.00	14.85	18.00	14.00
Gas pipe and fittings	385 lin. ft.	0.20	0.25	2.58	0.20	0.20
Lead-lined iron pipe and fittings	65 " "	0.50	0.70	1.04	1.00	1.00
Terra cotta duct conduits	17,000 duct ft.	0.06½	0.10	0.10	0.10	0.40
Lap-welded steel pipe ducts	500 lin. ft.	0.40	0.40	0.61	0.38	0.54
Exterior wiring, poles, lamps, etc.	lump sum	2,000.00	1,850.00	1,731.00	1,650.00	1,850.00
Telep. and patrol cables and connections.	" "	800.00	1,000.00	952.00	950.00	950.00
Indic. transm. and recording gage	" "	400.00	400.00	509.00	750.00	600.00
Telford-macadam roadways	3,600 sq. yds.	1.25	1.10	1.50	1.25	1.55
Paved gutters	44 " "	2.75	2.30	1.50	2.00	2.00
24-in. terra cotta drain pipe	33 lin. ft.	1.25	1.70	1.00	1.50	1.60
15-in. " " " "	145 " "	0.60	0.60	0.51	0.85	1.20
12-in. " " " "	345 " "	0.45	0.45	0.45	0.50	1.00
10-in. " " " "	300 " "	0.35	0.40	0.32	0.40	0.90
8-in. " " " "	300 " "	0.28	0.25	0.26	0.33	0.80
6-in. " " " "	400 " "	0.20	0.20	0.22	0.23	0.80
2-in. agricultural drain pipe	10,000 " "	0.02	0.025	0.05	0.036	0.03
Inlet gate house	lump sum	5,000.00	4,500.00	5.032.32	4,500.00	4,500.00
Outlet gate house	" "	5,000.00	4,900.00	5,050.00	4,400.00	4,500.00
Hand trolley cranes	2 cranes	500.00	500.00	491.15	450.00	450.00
Boat, etc	2 "	150.00	100.00	75.00	225.00	175.00
Gate entrances	2 entran's	300.00	300.00	500.00	460.00	1,000.00
Seeding	12 acres	50.00	50.00	124.00	42.00	80.00
Sodding	1,600 sq. yds.	0.50	0.30	0.35	0.30	0.28
Totals		$456,197	$417,007	$501,066	$475,591	$423,120

FILTRATION PLANT.—Pittsburg, Pa.—Bids were received March 8 by Department Public Works, Bureau of Filtration, for work under Contract No. 3, which calls for river crossing and connections at Brilliant Pumping Station and appurtenances, in connection with erection of the municipal filtration plant. The bids received and engineer's estimate are as follows: (1) Engineer's estimate; (2) T. A. GILLESPIE CO. (awarded contract); (3) Daniel J. McNichol & Co., Philadelphia; (4) Booth & Flinn, Ltd., Pittsburg; (5) Dravo Contracting Co., Pittsburg:

Bids Received at Pittsburg, Pa., March 8, for Filtration Plant. Contract No. 3.

	Quantity.	(1)	(2)	(3)	(4)	(5)
Excavation in river section	lump sum	$10,000.00	$12,826.00	$10,000.00	$8,000.00	$8,000.00
Excavation on land section	4,000 cu. yds.	0.60	0.81	1.00	1.76	1.73
Excavation in Brilliant Pumping Station.	400 " "	1.00	0.81	3.00	3.50	3.40
Cofferdam	lump sum	33,000.00	18,900.00	72,336.00	32,000.00	31,500.00
Timber piles	16,000 lin. ft.	0.50	0.34	0.45	0.41	0.40
Sheet piles	84 M. ft. B.M.	90.00	70.50	45.00	65.00	64.00
Yellow pine lumber	26 M. ft. B.M.	40.00	105.00	40.00	85.00	85.00
Riprapping stone	1,200 cu. yds.	2.00	3.80	3.00	2.65	2.70
Concrete in river cross., Class J	3,000 " "	5.50	5.05	4.82	5.10	5.00
Concrete in Brilliant Pump. Sta., Cl. B.	800 " "	7.00	5.80	10.82	6.20	6.10
Reinforced concrete, Class I	400 " "	10.00	11.00	11.97	8.15	8.00
Change in ratio of cement	100 " "	0.40	0.31	0.60	0.40	0.46
Expanded metal	7,300 sq. ft.	0.10	0.13	0.08	0.05	0.05
Miscellaneous steel reinforcement	20,000 lbs.	0.05	0.025	0.05	0.0525	0.055
Brick masonry and paving	30 cu. yds.	15.00	13.65	18.00	14.00	13.00
72-in. steel pipe, ½-in. thick	2,600 lin. ft.	22.00	22.70	20.90	18.75	19.10
Miscellaneous steel pipe	92,000 lbs.	0.08	0.068	0.14	0.0725	0.07
Steel castings	6,600 "	0.08	0.15	0.18	0.17	0.18
C. I. hub and spigot pipe and specials	30 tons	55.00	53.00	82.50	76.00	78.00
C. I. flange pipe and specials	58 "	100.00	145.00	102.00	107.00	109.00
Miscellaneous W. I. and steel	20,000 lbs.	0.05	0.05	0.10	0.06	0.065
Miscellaneous C. I. work	50,000 "	0.04	0.05	0.10	0.045	0.05
6-ft. × 8-ft. hand oper. sluice gate.	1 gate	1,700.00	2,016.00	1,815.00	1,800.00	1,800.00
72-in. circ. hand oper. sluice gates	2 gates	1,200.00	1,512.00	1,540.00	1,350.00	1,325.00
7-HP. air motor	1 motor	150.00	250.00	168.00	300.00	275.00
42-in. hydr. lift flange stop valve	1 valve	1,200.00	1,260.00	908.00	1,350.00	1,400.00
36-in. hydr. lift flange stop valve	4 valves	850.00	882.00	550.00	875.00	900.00
30-in. hydr. lift flange stop valve	2 "	600.00	567.00	462.00	615.00	625.00
6-in. flange or bell stop valves	3 "	17.00	25.00	19.14	25.00	25.00
4-in. flange stop valves	5 "	10.00	25.00	11.50	18.00	20.00
72-in. Venturi meters	2 meters	3,000.00	3,150.00	2,530.00	2,700.00	2,688.00
Lead-lined iron pipe	1,400 lin. ft.	0.50	0.52	1.05	0.50	0.56
Indicating and recording gage		150.00	126.00	229.00	127.00	138.00
Telephone cable	1,500 lin. ft.	0.30	0.33	0.40	0.35	0.38
Centrifugal pump	1 pump	200.00	365.00	1,238.00	350.00	375.00
Stop plank lifters	3 lifters	50.00	50.00	46.20	50.00	53.00
Removing masonry	1,200 cu. yds.	5.00	8.20	3.39	2.75	3.00
Removing pipes, screens, floors, etc.	lump sum	2,000.00	2,520.00	300.00	400.00	500 00
Pumping & cleaning wet wells at Brilliant Pump Sta.		500.00	756.00	350.00	500.00	500.00
Replacing pipes, floors, etc.	lump sum	1,000.00	3,276.00	500.00	800.00	800.00
Supp. and moving existing machinery		800.00	1,038.00	1.200.00	500.00	500.00
Surface condensers	lump sum	6,000.00	10.580.00	7,800.00	9,430.00	9,530.00
Totals		$202,759	$207,373	$249,207	$192,950	$135,434

AUTOMATIC SEMAPHORE SIGNALS.—Union Switch & Signal Co., Pittsburg, Pa. Paper; 6 × 9 ins.; pp. 10; illustrated.

An explanation is given in this circular of the operation and maintenance of the automatic "Union" electric semaphore signal, a large-sized view of the instrument illustrating the text.

FOLDING DOORS.—Variety Mfg. Co., 77 West Lake St., Chicago. Paper; 6¾ × 9½ ins.; pp. 24; illustrated.

These doors are for warehouses, freight piers and freight houses, factories, machine shops, etc., and are in extensive use. The door is divided into two panels, with a horizontal joint, so that the panels fold together as the door is opened.

NATURAL CEMENT.—Western Cement Co., 247 W. Main St., Louisville, Ky. Paper, 3¼ × 6 ins., pp. 16, illustrated.

The merits of Louisville natural hydraulic cement are set forth, with diagrams of tests, list of users, and particulars of a cinder-concrete arch test. A separate circular relates to a special "Bricklayers'" cement for making a short but slow-setting mortar for use in brick and stone masonry.

CHANNELERS.—The Ingersoll-Sergeant Drill Co., 26 Cortlandt St., New York. 6 × 9 ins.; pp. 16.

This catalogue is particularly devoted to the "Broncho" channeler, which is an outgrowth of the bar channeler. It consists of a channeling machine mounted on two parallel bars along which it is moved automatically by a three-cylinder engine actuating a traveling feed nut. Photographs show the operation of the machine in various quarries.

ELECTRIC LIFTING MAGNETS.—Electric Controller & Supply Co., Cleveland, Ohio. Paper; 5 × 7 ins.; pp. 8; illustrated.

This little book has the purpose of explaining the features of a plunger electromagnet made by this company. The magnet is so arranged that no cushioning of the plunger is required at the top of its stroke. The booklet suggests that many other kinds of lifting magnets are made by the same company.

AIR COMPRESSORS.—The Ingersoll-Sergeant Drill Co., 26 Cortlandt St., New York. 7 × 10 ins.; pp. 100.

This catalogue is given up to illustrations and tabular data relating to the various types and sizes of the air compressors manufactured by this company. At the close of the catalogue will be found useful information on heat and pressure curves, and tables showing the quantity of air delivered through pipes and the consumption of air by drills.

COAL AND ASH DISTRIBUTING PLANT.—Jeffries Manufacturing Co., Columbus, O. 6 × 9 ins.; pp. 8.

This bulletin illustrates and describes a novel plant for distributing coal and ashes. A steel trestle spans the ash pit and the pit into which coal cars discharge. An electric trolley travels on this trestle and operates a clamshell bucket. This plant is in operation at the power house of the Scioto Valley Traction Company, Reese's Station, Ohio.

TELPHERAGE PLANTS.—United Telpherage Co., 20-22 Broad St., New York. 9 × 12 ins.; pp. 24.

This catalogue is largely taken up with photographs of telpherage plants installed by this company for a great variety of purposes. Electricity is used as the motive power. Among the most interesting photographs are those showing telphers for carrying baggage in railway stations, telphers for handling coal and ashes, and telphers for conveying manufactured products.

EXPANDED METAL FIREPROOF CONSTRUCTION.—Associated Expanded Metal Fireproofing Cos., New York, Chicago and St. Louis. Paper; 8¾ × 12 ins.; pp. 64; illustrated.

This handsome publication shows a variety of applications of expanded metal for fireproof construction, and also for reinforced concrete work. There are also numerous illustrations of buildings, docks, bridges, sewers, retaining walls and other structures in which this material has been used.

GRADING AND DRILLING MACHINERY.—National Drill & Mfg. Co., Chicago, Ill. Paper, oblong; 10¾ × 7½ ins.; pp. 33; illustrated.

This is an illustrated descriptive pamphlet covering graders for railway, road and canal work; also road machines and scrapers. Dump wagons for handling earth, gravel and stone are shown, and a drilling machine for well or prospecting work. There are numerous views of the machines, and interesting views of works upon which they have been employed.

INTEGRATING WATTMETERS.—Fort Wayne Electric Works, Ft. Wayne, Ind. Paper; serial bulletins, 8 × 10½ ins.; illustrated.

Bulletin 1061 is a general description of multiphase integrating wattmeters of the induction type, known as type "K." Meters of this type are made for all standard voltages, from 110 to 2,200, up to 150 amperes, or even larger, and for various frequencies from 25 to 140 per second. An index of Ft. Wayne bulletins which are in force at the present time is also presented.

ELECTRIC LIGHT AND POWER.—Brooklyn Edison Co., Brooklyn, N. Y. Paper; 6 × 9½ ins.; pp. 32; illustrated.

Any manager of an electric light plant who wants a suggestion as to suitable and attractive advertising to boom the sale of current should get this pamphlet. A wealth of excellent illustrations shows the wide use made in Brooklyn of electric lamps for ornamentation and display, and the accompanying text says a good bit about power from electric motors in addition to talking electric illumination.

MILLING MACHINES.—The Garvin Machine Co., New York City. 3½ × 6 ins.; pp. 24.

Milling machines, slotters and laths are illustrated in this pamphlet.

GAS AND GASOLINE ENGINES.—The Dean-Waterman Co., Covington, Ky. Paper, oblong; 10 × 6¼ ins.; pp. 24; illustrated.

These are horizontal engines of the four-cycle type, with single and double cylinders in the different sizes. The construction is described and there are tables of dimensions, weight, etc. Both stationary and portable engines are included.

ELECTRIC RAILWAY EQUIPMENT.—National Electric Co., Milwaukee, Wis. Board; 9 × 6 ins.

Separate cards recently issued by the National Electric Co. show in an artistic manner some applications of their electric railway machinery. Thus, one shows an interurban car hauling a trailer, on the Birmingham, Ala., lines, the cars on which are equipped with Christensen air brakes made by this company; another shows an electric traction generating station in which some large "National" direct current generators are installed.

COAL MINING MACHINERY.—The Ingersoll-Sergeant Drill Co., 26 Cortlandt St., New York. 6 × 9 ins.; pp. 134.

This interesting catalogue illustrates the Ingersoll-Sergeant coal cutters and shows in detail how these machines are operated. Pneumatic coal boring machines are also described. Instructions are given for setting up and operating the coal cutters, and interesting line cuts and photographs show the platforms for operating the puncher coal cutter. Air drills and air compressors are also given considerable space in this catalogue.

INDUSTRIAL RAILWAYS.—C. W. Hunt Co., West New Brighton, Staten Island, N. Y. Paper; 3¼ × 6 ins.; pp. 40; illustrated.

Anybody desiring a pocket album of industrial railway applications will do well to send for this booklet. An abundance of half-tone illustrations shows industrial cars and railway lines in great variety.

An accompanying 20-page pamphlet, entitled "An Introduction," suggests by illustration and text a great many other lines of work produced by the company, such as coal towers, conveyors, cable railways, steam and electric hoisting engines, etc., etc.

STEAM SHOVELS, DREDGES, PILE DRIVERS AND WRECKING CRANES.—The Bucyrus Co., South Milwaukee, Wis. Cloth, 4 pamphlets, oblong, 11 × 7¾ ins., pp. 61, 45, 52 and 29, illustrated.

These handsome pamphlets consist mainly of full-page half-tone engravings of various machines, with particulars of their equipment, special features, etc. The first shows steam shovels of various sizes and engaged in various classes of work. One is devoted to dipper dredges, and a third to placer dredging machinery. The dredge boat is equipped with apparatus for collecting and saving the gold from gravel excavated by a ladder dredge, while the tailings are carried away by a conveyor. The fourth pamphlet is devoted to railway wrecking cranes and pile drivers, and includes a 100-ton wrecking crane and a pile-driver with steel car, steel frame and steel leaders.

ELECTRIC MOTORS.—Westinghouse Electric & Manufacturing Co., Pittsburg, Pa. Paper; serial form; 7 × 10 ins.; illustrated.

Circular 1099 shows a new style of very small direct-current motors recently brought out, called type "R"—a bipolar motor of very compact and pleasing appearance. These motors are shunt-wound, are built in sizes of from 1-6 to 1¾ HP., and are wound for either 110 or 220 volts. Circular 1097 treats very fully and in detail of type "K" motors, which are direct-current series motors designed for crane and hoist service. Following the description, full sets of curves for various sizes and voltages are shown.

CAST-IRON PIPE, SPECIALS AND GAS AND WATER-WORKS APPLIANCES.—M. T. Drummond & Co., 182 Broadway, New York; Foundries at Lynchburg and Radford, Va. Cloth; 8 × 5½ ins.; pp. 112; illustrations and tables.

An excellent feature of this catalogue is the number of well-executed line cuts, fully lettered and with dimensions on the cuts or in adjoining tables. Cast-iron pipe and specials, both hub and spigot and flanged, valves and valve and meter boxes, pipe saddles, lead furnaces, pipe jointers, Venturi meters and recorders, fire hydrants and other supplies are included. There is also an illustrated description of a testing plug, for testing pipe, which can be applied or removed without calking. Useful tables complete the book.

MODERN BATH ROOMS.—With a Few Suggestions about Plumbing Valuable to Home Builders. Standard Sanitary Mfg. Co., Pittsburg, Pa. Paper; 6⅛ × 8 ins.; pp. 98; illustrated.

MODERN SANITARY APPLIANCES FOR PUBLIC INSTITUTIONS, SCHOOLS, FACTORIES, ETC.—Standard Sanitary Mfg. Co., Pittsburg, Pa. Paper; 9 × 12 ins.; pp. 83; illustrated.

A notable feature of the first of these catalogues is an extended series of views of bath room interiors, with a descriptive price-list of the various fittings on the facing page. Following that various fixtures are illustrated, described and priced separately.

The second catalogue shows a number of styles of multiple wash basins and sinks and a large variety of automatic range water closets. Besides reproductions of wash drawings there are line cuts of some of the water closets.

Nearly all the goods shown in the two catalogues are of enameled iron. The catalogues indicate careful design and workmanship in the goods and the catalogues themselves are well made and attractive.

CONTRACT PRICES

FILTRATION PLANT.—Pittsburg, Pa.—Bids were received March 8 by Department Public Works, Bureau of Filtration, for work under Contract No. 4, which calls for centrifugal pumps, engines, and appurtenances for use in connection with city filtration plant, the contract being awarded to T. A. GILLESPIE CO. The bids received were as follows: (1) furnishing four 30,000,000-gallon centrifugal pumps, 46-ft. head, (2) four compound condensing engines of 600 HP. each, (3) four condensers and air pumps, (4) totals:

Names.	(1)	(2)	(3)	(4)
Engineer's estimate...	$10,000	$15,000	[illegible]	$112,000
T. A. Gillespie Co......	6,800	11,700	[illegible]	89,600
Daniel J. McNichol Co..	6,000	13,000	[illegible]	88,800
Booth & Flinn.........	5,561	12,918	[illegible]	86,680
Allis-Chalmers Co.....	5,800	11,700	[illegible]	81,600
William Tod Co........	7,000	15,000	[illegible]	102,4[illegible]0

FILTRATION PLANT.—Pittsburg, Pa.—Following bids were received March 8 by Department Public Works, Board of Filtration, for work under Contract No. 5, which calls for boilers, economizers, piping and appurtenances, for city filtration plant, the contract being awarded to T. A. GILLESPIE CO.: (1) furnishing eight 350-HP. water-tube boilers, etc., (2) eight mechanical stokers, (3) two 300-tube fuel economizers, (4) Totals:

Names.	(1)	(2)	(3)	(4)
Engineer's estimate...	$5,500	$1,800	$4[illegible]	$67,000
The T. A. Gillespie Co..	5,650	1,475	4[illegible]	66,950
Daniel J. McNichol & Co.	5,865	1,348	4[illegible]	66,426
Booth & Flinn, Ltd....	4,634	1,256	4[illegible]	55,930
Babcock & Wilcox.....	5,865	1,300	4[illegible]	66,920
Aultman Taylor Co....	5,315	1,318	4[illegible]	62,662
Heine Safety Boiler Co.	4,374	1,287	4[illegible]	53,939
Erie City Iron Works..	4,765	1,347	4,[illegible]	58,496

FILTRATION PLANT.—Pittsburg, Pa.—Bids were received March 8 by Department Public Works, Bureau of Filtration, for work under Contract No. 9, which calls for pumping engines, boilers, and appurtenances at Brilliant Pumping Station, in connection with new city filtration plant, the contract being awarded to T. A. GILLESPIE CO. The bids received and engineer's estimates were as follows: (1) Engineer's estimate, (2) T. A. Gillespie Co., (3) Daniel J. McNichol & Co., (4) Booth & Flinn, Ltd., (5) Allis-Chalmers Co., (6) William Tod & Co., (7) Camden Iron Works:

Bids received at Pittsburg, Pa., March 8, 1905, by Department Public Works, Bureau of Filtration, for Work Under Contract No. 9.

Items.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Two 15 mil. gal. crk. and flywheel pump, eng., 360 ft. hd..........	$100,000	$87,500	$100,000	$88,000	$87,000	$88,000	$100,000
Three water tube boilers, 500 H.P., each..........	7,500	7,950	6,034	6,480	6,667	6,300	6,000
Three stokers, etc..........	2,400	2,320	2,200	1,953	1,933	2,100	2,200
Coal handling machinery, etc..........	4,000	5,830	4,422	4,930	5,500	5,000	4,400
Flue and connections, etc..........	2,000	1,200	2,000	550	1,000	2,000	2,000
Piping in boiler room..........	4,000	5,000	5,400	3,930	4,600	6,000	5,400
Totals..........	$239,700	$217,840	$236,524	$210,709	$210,900	$214,200	$236,400

FILTRATION PLANT.—Pittsburg, Pa.—Bids were received March 8 by Department Public Works, Bureau of Filtration, for work under Contract No. 7, which calls for pumping station and appurtenances, in connection with construction of city filtration plant, the contract being awarded to T. A. GILLESPIE CO. The bids received and engineer's estimates were as follows: (1) Engineer's estimate; (2) T. A. Gillespie Co.; (3) Daniel J. McNichol & Co.; (4) Booth & Flinn, Ltd.; (5) Dravo Contracting Co., Pittsburg; (6) Henry Schenk & Co., Pittsburg; (7) The A. & S. Wilson Co., Pittsburg:

BIDS RECEIVED AT PITTSBURG, PA., MARCH 8, FOR FILTRATION PLANT. CONTRACT NO. 7.

Quantity.		(1)	(2)	(3)	(4)	(5)	(6)	(7)
Excavation......	16,000 cu. yds..	$0.50	$0.52	$0.75	$1.15	$1.10	$0.75	$1.50
Fill	13,000 " " ..	0.30	0.20	0.30	0.55	0.50	1.10	0.22
Concr. in found., Class F....	13,000 " " ..	6.00	4.40	5.32	5.40	5.50	5.50	6.10
Reinf's concr., Class I.......	600 " " ..	8.00	7.30	11.97	5.80	6.00	8.50	16.75
Non-reinf't concr., Class N...	400 " " ..	7.00	4.20	7.00	6.10	6.00	5.00	7.00
Granolit. surfac., etc........	2,000 sq. " ..	0.50	0.52	0.52	0.60	0.60	0.65	0.55
Change in ratio of cement....	100 cu. " ..	0.50	0.35	0.64	0.40	0.40	0.35	0.48 2/5
Steel reinf. in concrete........	57,000 lbs......	0.04	0.02¼	0.04	0.04	0.04	0.02½	0.04
Misc. brick masonry, etc.....	60 cu. yds..	15.00	9.00	12.00	11.00	10.00	12.50	7.82
C.-I. drains and appurt......	lump sum......	500.00	735.00	665.00	470.00	600.00	664.00	650.00
Sheeting & shor. left in pl....	30 M. ft. B. M..	15.00	38.00	30.00	20.00	20.00	45.00	26.00
Coal and ash handl. app......	lump sum......	6,000.00	10,200.00	9,147.00	10,800.00	11,000.00	9,900.00	9,995.00
Track scales, etc....	" "	1,200.00	1,300.00	1,293.00	1,050.00	1,100.00	1,197.00	1,265.00
Stone masonry in superstr....	" "	50,000.00	55,000.00	50,809.00	49,000.00	50,000.00	48,846.00	50,735.00
Brick masonry in superst......	" "	45,000.00	52,000.00	50,853.00	37,350.00	38,000.00	46,072.00	46,230.00
Chimney	" "	18,000.00	23,400.00	22,605.00	20,200.00	20,000.00	23,250.00	26,235.00
Structural steel, cast iron, etc.	" "	52,000.00	44,700.00	56,333.00	50,500.00	50,000.00	51,285.00	57,245.00
Carp. work, wood finish., etc..	" "	3,500.00	6,100.00	9,829.00	5,400.00	5,500.00	2,727.00	3,950.00
Tile roofing, etc..............	" "	11,000.00	11,500.00	14,190.00	12,250.00	12,000.00	10,942.00	8,545.00
Sheet & ornament. metal work.	" "	40,000.00	38,000.00	36,300.00	45,200.00	45,000.00	48,263.00	41,055.00
Plastering, etc......	" "	6,000.00	8,500.00	12,925.00	7,670.00	8,000.00	5,513.00	7,365.00
Floors, marb., slate, etc., office.	" "	1,500.00	1,200.00	2,008.00	1,950.00	2,000.00	1,436.00	1,155.00
Elec. ducts, wiring fixt., etc..	" "	4,000.00	5,000.00	4,620.00	4,650.00	4,600.00	4,372.00	21,300.00
Plumbing, fixt., and appurt...	" "	1,700.00	1,700.00	1,562.00	1,675.00	1,700.00	1,636.00	1,610.00
Heating apparat., fixtures, etc.	" "	2,500.00	2,600.00	2,448.00	2,665.00	2,640.00	2,468.00	2,440.00
Hardware and appurtenances..	" "	250.00	230.00	209.00	225.00	220.00	190.00	235.00
Painting, glazing, etc........	" "	3,500.00	3,300.00	3,447.00	3,490.00	3,500.00	3,767.00	3,255.00
Office furn., lockers, fittings..	" "	1,000.00	850.00	1,007.00	1,405.00	1,400.00	741.00	970.00
Totals		$349,830	$344,532	$380,296	$362,400	$363,580	$373,029	$407,923

WATER-WORKS AND LIGHT PLANT.

New Albany, Miss., Mar. 7, 1905.

Bids will be received at the town hall until Thursday, April 6 instead of Tuesday, March 28, 1905, for the construction of a water-works and light plant, according to the plans and specifications now on file.

The right to reject any and all bids is reserved. W. A. LIDDELL, Mayor.

E. M. OWEN, Clerk.

Address

W. F. WILCOX, Engineer, Jackson, Miss.

11-2t

PROPOSALS FOR WHITE BRICKS.—Office of Building for National Museum, Library of Congress, Washington, D. C., March 22, 1905.—Sealed proposals will be received at this office until two o'clock P. M. on Tuesday, April 11, 1905, for furnishing and delivering at the new building for the National Museum, in this city, White Bricks for the construction of the court yard walls. Specifications, general instructions and conditions, and blank forms of proposal may be obtained on application at this office. BERNARD R. GREEN, Superintendent of Construction. 12-2t

20,000 TO 30.000 BARRELS OF CEMENT.

Sealed tenders addressed to the Chairman of the Committee on Works for the supply of from 20,000 to 30,000 barrels of cement, will be received at the office of the undersigned up to 8.30 P. M., Tuesday, April 4, 1905.

Specifications and forms of tender may be obtained upon application at the office of Col. H. N. Rutan, City Engineer, Winnipeg.

Each tender must be accompanied by an accepted check, draft or cash deposit for the sum called for in the form of tender supplied, which will be subject to forfeiture in case of failure on the part of the contractor to enter into a written contract, with approved sureties, if called upon to do so.

The city reserves the right to reject any or all tenders or to accept any bid which appears advantageous to the City of Winnipeg.

C. J. BROWN,
City Clerk.

City Clerk's Office,
Winnipeg, March 3, 1905. 12-1t

WEST POINT, N. Y., March 21st, 1905.—Sealed proposals, in triplicate, will be received here until 12 o'clock, noon, April 20th, 1905, for the construction of two double and four triple sets of Officers' Quarters, and for the erection of Cadet Barracks, as per drawings and specifications on file in this office. The U. S. reserves the right to accept or reject any or all proposals or any part thereof. Forms and specifications furnished upon application. Address QUARTERMASTER, U. S. M. A. 12-4t

SITUATIONS OPEN

WANTED, by April 1st, an experienced draftsman and instrumentman not over 25 years of age. Apply by letter, stating experience. Do not send letters of reference, but give names of previous employers. Address "D. B. 12," Engineering News, New York. 12-1t

INSPECTOR WANTED, at once, as chief clerk in main office of consulting and inspecting engineers. Practical experience in mills, shops and office work necessary. State experience and salary expected. Address "E. B. 12," Engineering News, New York. 12-1t

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For other Proposal Advertisements see pages 35, 36, 37, 38, of Advertisements and Construction News page 114.